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PROCEEDINGS
OF THE
SOCIETY OF ANTIQUARIES OF SCOTLAND.

SESSION
MDCCCLXXXIV.-LXXXV.



VOL. XIX.

EDINBURGH:

PRINTED FOR THE SOCIETY BY NEILL AND COMPANY.

MDCCCLXXXV.





PROCEEDINGS

OF THE

Society of Antiquaries of Scotland

ONE HUNDRED AND FIFTH SESSION

1884-85



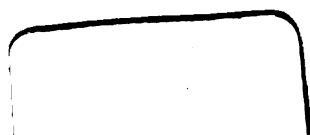
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Edinburgh

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ASSEMBLY - 1000-1000-1000

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SESSION 1885-86.

RHIND LECTURER IN ARCHÆOLOGY—J. ROMILLY ALLEN, C.E.

L A W S
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INSTITUTED NOVEMBER 1780.
(Revised and adopted December 1, 1873.)

The purpose of the Society shall be the promotion of ARCHÆOLOGY, especially as connected with the ANTIQUITIES AND HISTORICAL LITERATURE OF SCOTLAND.

I. MEMBERS.

1. The Society shall consist of Ordinary and Honorary Fellows, and of Corresponding and Lady Associates.
2. The number of the Ordinary Fellows shall be unlimited.
3. Candidates for admission as Ordinary Fellows must sign the Form of Application prescribed by the Council, and must be recommended by one Ordinary Fellow and two Members of the Council.
4. The Secretary shall cause the names of the Candidates and of their Proposers to be inserted in the billet calling the Meeting at which they are to be balloted for. The Ballot may be taken for all the Candidates named in the billet at once ; but if three or more black balls appear, the Chairman shall cause the Candidates to be balloted for singly. No Candidate shall be admitted unless by the votes of two-thirds of the Fellows present.
5. The number of Honorary Fellows shall not exceed twenty-five ; and

shall consist of men eminent in Archæological Science or Historical Literature, and they shall not be liable for any fees of admission or annual contributions.

6. All recommendations of Honorary Fellows must be made through the Council ; and they shall be balloted for in the same way as Ordinary Fellows.

7. Corresponding Associates must be recommended and balloted for in the same way as Ordinary Fellows, and they shall not be liable for any fees of admission or annual contributions.

8. The number of Lady Associates shall not exceed twenty-five. They shall be elected by the Council, and shall not be liable for any fees of admission or annual contributions.

9. Before the name of any person can be recorded as an Ordinary Fellow, he shall pay Two Guineas of entrance fees to the funds of the Society, and One Guinea for the current year's subscription. Or he may compound for all future contributions, including entrance fees, by the payment of Twenty Guineas at the time of his admission ; or of Fifteen Guineas after having paid five annual contributions ; or of Ten Guineas after having paid ten annual contributions.

10. If any Ordinary Fellow who has not compounded shall fail to pay his annual contribution of One Guinea for three successive years, due application having been made for payment, the Treasurer shall report the same to the Council, by whose authority the name of the defaulter may be erased from the list of Fellows.

11. Every Fellow not being in arrears of his annual subscription shall be entitled to receive the printed Proceedings of the Society from the date of his election, together with such special issues of Chartularies, or other occasional volumes, as may be provided for gratuitous distribution from time to time under authority of the Council. Associates shall have the privilege of purchasing the Society's publications at the rates fixed by the Council for supplying back numbers to the Fellows.

12. None but Ordinary Fellows shall hold any office or vote in the business of the Society.

OFFICE-BEARERS AND COUNCIL.

1. The Office-Bearers of the Society shall consist of a President, who continues in office for three years ; three Vice-Presidents, two Secretaries for general purposes, and two Secretaries for Foreign Correspondence, a Treasurer, two Curators of the Museum, a Curator of Coins, and a Librarian, who shall be elected for one year, all of whom may be re-elected at the Annual General Meeting, except the first Vice-President, who shall go out by rotation, and shall not be again eligible till he has been one year out of office.

2. The Council shall consist of the Office-Bearers and seven Ordinary Fellows, besides two annually nominated from the Board of Manufactures. Of these seven, two shall retire annually by rotation, and shall not be again eligible till they have been one year out of office. Any two Office-Bearers and three of the Ordinary Council shall be a quorum.

3. The Council shall have the direction of the affairs and the custody of the effects of the Society ; and shall report to the Annual General Meeting the state of the Society's funds, and other matters which may have come before them during the preceding year.

4. The Council may appoint committees or individuals to take charge of particular departments of the Society's business.

5. The Office-Bearers shall be elected annually at the General Meeting.

6. The Secretaries for general purposes shall record all the proceedings of meetings, whether of the Society or Council ; and conduct such correspondence as may be authorised by the Society or Council, except the Foreign Correspondence, which is to be carried on, under the same authority, by the Secretaries appointed for that particular purpose.

7. The Treasurer shall receive and disburse all moneys due to or by the Society, and shall lay a state of the funds before the Council previous to the Annual General Meeting.

8. The duty of the Curators of the Museum shall be to exercise a general supervision over it and the Society's Collections.

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for the due despatch of business ; and the Secretaries shall have power to call Meetings of the Council as often as they see cause.

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1. One General Meeting shall take place every year on St Andrew's day, the 30th of November, or on the following day if the 30th be a Sunday.

2. The Council shall have power to call Extraordinary General Meetings when they see cause.

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NOVEMBER 30, 1885.

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- 1863.*BECK, Rev. JAMES, A.M., Rector of Bildeston, Suffolk.
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1877. BEGG, ROBERT BURNS, Solicitor, Kinross.
1875. BEITH, DONALD, W.S., 15 Grosvenor Crescent.
1877. BELL, ROBERT CRAIGIE, W.S., 1 Clifton Terrace.
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1884. BETT, JAMES, Factor for the Earl of Breadalbane, Bolfacks, Aberfeldy.
- 1873.*BEVERIDGE, JAMES A., 9 Belgrave Crescent.
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1882. BLACK, WILLIAM GEORGE, 1 Alfred Terrace, Hillhead, Glasgow.
- 1847.*BLACKIE, WALTER G., Ph.D., 17 Stanhope Street, Glasgow.
1882. BLACKWOOD, JAMES, Gillsburn, Kilmarnock.
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1883. BLAIR, F. C. HUNTER, B.A., Blairquhan, Maybole.
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1883. BLOKSOM, WILLIAM G., 25 St Andrew Square.
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1885. BOMPAS, CHARLES S. M., 121 Westbourne Terrace, London.
- 1880.*BONAR, HORATIUS, W.S., 15 Hill St.
1876. BONNAR, THOMAS, 127 George Street.
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- 1873.*BOYD, WILLIAM, M.A., Solicitor, Peterhead.
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1883. BRAND, DAVID, Advocate, 9 Albany St.
- 1884.*BREADALBANE, The Most Hon. the Marquis of, Taymouth Castle.
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- 1857.*BRODIE, THOMAS DAWSON, W.S., 9 Ainslie Place.
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1878. BROWN-MORISON, JOHN BROWN, of Findlerie, Harrow-on-Hill.
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- 1849.*BROWN, A. J. DENISTON, Balloch Castle, Dumbarton.

1884. BROWN, G. BALDWIN, M.A., Professor of Fine Art, University of Edinburgh.
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1882. BROWN, ROBERT, Underwood Park, Paisley.
- 1865.*BROWN, WILLIAM, F.R.C.S.E., 25 Dublin Street.
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1882. BROWNE, GEORGE WASHINGTON, Architect, 19 St Andrew Square.
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- 1863.*BRUCE, HENRY, of Ederline, Lochgilphead.
1882. BRUCE, JAMES, W.S., 23 St Bernard's Crescent.
1880. BRUCE, Rev. WILLIAM, Dunimarle, Culross.
1880. BRYDEN, ROBERT, Waltham Lodge, Murrayfield.
- 1885.*BUCHANAN, THOMAS RYBURN, M.P., 10 Moray Place.
1882. BUIST, JOHN B., M.D., Lecturer on Pathology, 2 Grosvenor Street.
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- 1863.*BURNETT, GEORGE, LL.D., Advocate, Lyon King-of-Arms, 21 Walker Street.
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- 1867.*BUTE, The Most Honourable the Marquis of, K.T., LL.D.
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1883. CAMERON, Rev. ALEXANDER, F.C. Manse, Brodick, Arran.
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- 1865.*CAMPBELL, Rev. JAMES, D.D., The Manse, Balmerino, Fifeshire.
1884. CAMPBELL, JAMES, Constitutional Club, Regent Street, London, S.W.
- 1877.*CAMPBELL, JAMES, of Tillychewan, Alexandria, Dumbartonshire.
- 1874.*CAMPBELL, JAMES A., LL.D., M.P., of Stracathro, Brechin.
- 1850.*CAMPBELL, Rev. JOHN A. L., Helpston, Northamptonshire.
1882. CAMPBELL, PATRICK W., W.S., 49 Melville Street.
- 1884.*CAMPBELL, RICHARD VARY, Advocate, 87 Moray Place.
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- 1862.*CARFRAE, ROBERT, 77 George Street, —*Curator of Museum*.
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- 1869.*CARMICHAEL, Sir W. GIBSON, Bart., of Castlecraig, Dolphinton.
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- 1874.*CHALMERS, DAVID, Redhall, Slateford.
- 1865.*CHALMERS, JAMES, Westburn, Aberdeen.
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- 1867.*CLARK, ROBERT, 42 Hanover Street.
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- 1870.*COGHILL, J. G. SINCLAIR, M.D., St Catherine's House, Ventnor, Isle of Wight.
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- 1826.*CRAIG, JAMES T. GIBSON, 24 York Pl.
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- 1857.*DALRYMPLE, CHARLES E., Kinellar Lodge, Blackburn, Aberdeenshire.
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- 1877.*DUNDAS RALPH, C.S., 16 St Andrew Square.
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- 1873.*FINDLAY, JOHN RITCHIE, 3 Rothesay Terrace,—*Secretary*.
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- 1862.*FORBES, WILLIAM, of Medwyn, 17 Ainslie Place,—*Foreign Secretary*.
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- 1883.*FOSTER, WALTER KIDMAN, 45 Leinster Gardens, Hyde Park, London.
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- 1862.*FRASER, ALEXANDER, Canonmills Lodge, Canonmills.
- 1857.*FRASER, PATRICK ALLAN, of Hospital Field, Arbroath.
- 1864.*FRASER, The Hon. Lord, 8 Moray Place.
- 1851.*FRASER, WILLIAM, C.B., LL.D., Deputy Keeper of Records, 82 Castle Street.
1883. FRASER, Rev. WILLIAM RUXTON, M.A., Minister of Maryton, Montrose.
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1877. GIBB, JOHN S., 8 Buccleuch Place.
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- 1870.*GLASGOW, Right Hon. The Earl of, LL.D., Lord Clerk Register of Scotland.
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1885. GOLDSMID, EDMUND, Lufra House, Granton Road.
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1877. GORDON, Rev. ROBERT, of Free Buccleuch Church, 11 Mayfield Gardens.
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1883. GORDON, R. B. WOBRIGE, Grenadier Guards, London.
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1885. GOUDIE, JAMES T., Janefield, Albert Drive, Pollockshields.
1878. GOW, JAMES M., Union Bank, 66 George Street.
- 1851.*GRAHAM, WILLIAM, LL.D., 11 Eildon Street.
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1884. GRAY, J. MILLER, Curator, National Portrait Gallery of Scotland, 25 York Place.
1877. GRAY, ROBERT, Bank of Scotland House.
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- 1866.*GREENSHIELDS, JOHN B., Advocate, of Kerse, Lesmahagow.
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- 1863.*GRIGOR, JOHN, M.D., Larkfield, Nairn.
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- 1861.*HADDINGTON, Right Hon. The Earl of, Tynninghame, Prestonkirk.
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1849. *MACGRIGOR, ALEXANDER BENNET, LL.D., of Cairnoch, 19 Woodside Terrace, Glasgow.
1884. MACGREGOR, GEORGE, 30 Roselea Drive, Dennistoun, Glasgow.
1884. MACINTYRE, ALEXANDER C., Merchant, 99 Renfield Street, Glasgow.

1877. MACKAY, ALEXANDER, Trowbridge, Wilts.
- 1876.*MACKAY, ZENAS J. G., LL.D., Advocate, 7 Albyn Place.
1872. MACKAY, F. A., 3 Buckingham Terrace.
1882. MACKAY, WILLIAM, Solicitor, Inverness.
- 1852.*MACKENZIE, ALEXANDER KINCAID, 19 Grosvenor Crescent.
1880. MACKENZIE, ALEXANDER, Editor of the *Celtic Magazine*, Inverness.
1882. MACKENZIE, Rev. ALEXANDER, M.A., 6 Fettes Row.
1879. MACKENZIE, ANDREW, Dalmore, Alness.
- 1877.*MACKENZIE, Major COLIN, 49 Pall Mall, London.
1872. MACKENZIE, Rev. JAMES B., Kenmore, Aberfeldy.
1882. MACKENZIE, R. W. R., Stormontfield, Perth.
1870. MACKENZIE, THOMAS, Sheriff-Substitute, Tain.
1873. M'KERLIE, P. H., 26 Pembridge Villas, Bayswater, London.
1876. M'KIE, THOMAS, Advocate, 1 Gloucester Place.
- 1864.*MACKINTOSH, CHARLES FRASER, of Drummond, M.P., 16 Union Street, Inverness.
- 1865.*MACKISON, WILLIAM, Architect, 8 Constitution Terrace, Dundee.
1878. MACLAGAN, ROBERT CRAIG, M.D., 5 Coates Crescent.
- 1864.*M'CLAREN, DUNCAN, Newington House.
1877. MACLAREN, JOHN, 6 Chamberlain Road, Morningside.
- 1856.*M'LAUCHLAN, Rev. THOMAS, LL.D., St Columba's Manse, Viewforth.
1885. MACLEHOSE, JAMES J., 61 St Vincent Street, Glasgow.
1875. MACMATH, WILLIAM, 16 St Andrew Square.
1879. MACMILLAN, ALEXANDER, M.A., Knapdale, Upper Tooting, Surrey.
1884. MACMILLAN, Rev. HUGH, D.D., LL.D., 70 Union Street, Greenock.
- 1855.*MACNAB, JOHN MUNRO, Killin House, St Thomas Road, Grange.
1874. M'NEILL, MALCOLM, 5 North Manor Place.
1882. MACPHAIL, Rev. J. C., Pilrig Manse, Pilrig.
1878. MACPHERSON, NORMAN, LL.D., Professor of Scots Law, University of Edinburgh, Sheriff of Dumfries and Galloway.
- 1882.*MACRITCHIE, DAVID, C.A., 4 Archibald Place.
- 1878.*MAKELLAR, Rev. WILLIAM, 8 Charlotte Square.
1882. MARJORIBANKS, Rev. GEORGE, B.D., Stenton, Prestonkirk.
1872. MARSHALL, DAVID, Loch Leven Place, Kinross.
1885. MARSHALL, WILLIAM HUNTER, W.S., 25 Heriot Row.
1873. MARTINE, WILLIAM, M.D., Haddington.
- 1861.*MARWICK, JAMES DAVID, LL.D., City Clerk, City Chambers, Glasgow.
1871. MAXWELL, ALEXANDER, 9 Viewforth Street, Dundee.
1884. MAXWELL, Sir HERBERT EUSTACE, Bart., M.P., Monreith, Whauphill.
1885. MAXWELL, FRANCIS, Gribton, Dumfries.
1873. MELVIN, JAMES, 2 West Drumsheugh Gardens.
- 1853.*MERCER, GRAEME R., of Gorthy, Gintulchan, Perth.
1878. MERCER, WILLIAM LINDSAY, of Huntingtower, Perth.
1885. METCALFE, Rev. W. M., South Manse, Paisley.
1882. MILLAR, ALEXANDER H., 6 Norman Terrace, Downfield, Dundee.
1876. MILLAR, WILLIAM WHITE, S.S.C., 16 Regent Terrace.
1883. MILLER, GEORGE, C.A., Acre Valley, Tortance, Stirlingshire.
1878. MILLER, GEORGE ANDERSON, W.S., Knowehead, Perth.
1866. MILLER, PETER, Surgeon, 8 Bellevue Terrace.
- 1851.*MILLER, SAMUEL CHRISTIE, of Craigentiny, 21 St James's Place, London.
1883. MILLER, WILLIAM, S.S.C., 59 George Square.

1886. MILLIDGE, EDWIN, Jeweller, 28 Princes Street.
1867. MITCHELL, ARTHUR, M.D., LL.D., Commissioner in Lunacy, 84 Drummond Place,—*Vice-President*.
1880. MITCHELL, CHARLES, Kintrockat, Brechin.
1884. MITCHELL, HUGH, Solicitor, Pitlochry.
1885. MONTEITH, Rev. JOHN, Glencairn Manse, Thornhill, Dumfriesshire.
- 1851.*MONTGOMERY, Sir GRAHAM G., Bart., Stobo Castle, Peeblesshire.
- 1867.*MORAY, CHARLES HOME DRUMMOND, of Abercairny, Perthshire.
- 1877.*MORAY, HENRY E. H. DRUMMOND, yr. of Blair-Drummond.
1867. MORICE, ARTHUR D., Advocate, 34 Marischall Street, Aberdeen.
1882. MORRIS, JAMES ARCHIBALD, Architect, 16 Adamson Road, St John's Wood, London.
1882. MORRISON, HEW, Smith's Institution, Brechin.
1877. MUDIE, JAMES, Craiggowan, Broughty Ferry.
1888. MUDIE, DAVID COWAN, 10 Dalrymple Crescent.
1877. MUIRHEAD, ANDREW, 23 Northumberland Street.
1872. MUIRHEAD, J. J., 97 Princes Street.
1874. MUNRO, CHARLES, 18 George Street.
1879. MUNRO, ROBERT, M.A., M.D., Kilmar-nock.
1884. MUNRO, Rev. ROBERT, M.A., B.D., Old Kirkpatrick, Glasgow.
1885. MURDOCH, Rev. A. D., All Saints' Parsonage, Brougham Street.
1879. MURDOCH, JAMES BARCLAY, Hamilton Place, Langside, Glasgow.
1878. MURRAY, DAVID, M.A., 169 West George Street, Glasgow.
1884. MURRAY, PATRICK, W.S., 12 Ann St.
- 1853.*MURRAY, THOMAS GRAHAM, W.S., 11 Randolph Crescent.
- 1863.*MYLNE, ROBERT WILLIAM, Architect, 7 Whitehall Place, London.
1885. NAISMITH, ROBERT, Cross, Stone-house.
- 1864.*NEILSON, JOHN, W.S., 23 East Claremont Street.
- 1876.*NEPMAN, Sir MOLYNEUX, Bart., Loders Court, Dorset.
- 1861.*NICOL, ERSKINE, R.S.A., Torduff House, Colinton.
1875. NICOL, GEORGE H., Tay Beach Cottage, West Ferry, Dundee.
1875. NICOLSON, ALEXANDER, LL.D., Sheriff-Substitute, Greenock.
1885. NICOLSON, DAVID, M.D., Broadmoor, Crowthorne, Berks.
1877. NIVEN, ALEXANDER T., C.A., 8 Fountainhall Road.
1867. NORTHESK, Right Hon. The Earl of, 76 George's Square, London.
1867. NORTHUMBERLAND, His Grace The Duke of.
1877. OGILVIE, WILLIAM M., Bank House, Lochee, Dundee.
1882. OLIVER, Rev. JOHN, Belhaven, Dunbar.
- 1832.*OMOND, Rev. JOHN REID, Monzie, Czieff.
1881. OUTRAM, DAVID E., 16 Grosvenor Terrace, Glasgow.
1880. PANTON, GEORGE A., 12 Osborne Terrace.
1880. PARK, GEORGE HARRISON, 6 Shandwick Place.
1885. PARKER, CHARLES ARUNDEL, M.D., Gosforth, Cumberland.
1883. PARLANE, JAMES, of Appleby, Rushholme, Manchester.
1880. PATERSON, ALEXANDER, M.D., Fernfield, Bridge of Allan.
- 1862.*PATERSON, GEORGE A., M.D., 15 Merchiston Park.
- 1859.*PATON, JOHN, 8 Blackford Road.
- 1859.*PATON, Sir JOSEPH NOEL, R.S.A., Knt., LL.D., 33 George Square.
1869. PATON, WALLER HUGH, R.S.A., 14 George Square.
- 1870.*PATRICK, R. W. COCHRAN, LL.D., M.P., Woodside, Beith,—*Secretary*.
1880. PATTERSON, JAMES R., Ph.D., President of the Agricultural College, Lexington, Kentucky, U.S.A.

1871. PAUL, GEORGE M., W.S., 16 St Andrew Square.
1879. PAUL, J. BALFOUR, Advocate, 82 Great King Street.
1882. PAUL, Rev. ROBERT, F.C. Manse, Dollar.
1874. PAXTON, WILLIAM, 3 Fountainhall Road.
1880. PEACE, MASKELL WILLIAM, Ashfield, Wigan.
1879. PEDDIE, J. M. DICK, Architect, 3 South Charlotte Street.
- 1855.*PENDER, JOHN, M.P., 18 Arlington Street, London.
1874. PETER, Rev. JAMES, Deer, Aberdeenshire.
1878. PETERS, Rev. W., M.A., The Manse, Kinross.
1882. PETRIE, DAVID, 28 Nelson Street.
1884. PIKE, ALBERT, Councillor-at-Law, Washington, D.C., U.S.A.
- 1885.*PIRIE, ROBERT, 9 Buckingham Terrace, Hillhead, Glasgow.
1883. PITT-RIVERS, Major-General A. H. L. Fox, 4 Grosvenor Gardens, London.
1878. PLEVOST, Colonel T. W., 25 Moray Place.
1881. PRICHARD, Rev. HUGH, Dinam, Gaerwen, Anglesea.
- 1860.*PRIMROSE, Hon. BOUVERIE F., C.B., 22 Moray Place.
1878. PRINGLE, JOHN, M.D., Dep.-Inspector-General of Hospitals, 27 Rutland Square.
1878. PRYDE, DAVID, LL.D., 10 Fettes Row.
- 1865.*RAINY, ROBERT, D.D., Principal and Professor of Theology and Church History, New College, Edinburgh, 23 Douglas Crescent.
1878. RAMPINT, CHARLES, Sheriff-Substitute, Springfield House, Elgin.
- 1864.*RAMSAY, Major JOHN, of Straloch and Barra, Aberdeenshire.
1880. RAMSAY, JOHN, of Kildalton, M.P., Islay.
1879. RANKINE, JOHN, Advocate, 10 Melville Street.
1874. RATTRAY, JAMES CLERK, M.D., 61 Grange Loan.
1883. READMAN, JAMES B., 9 Moray Place.
1882. REID, ALEXANDER GEORGE, Solicitor, Auchterarder.
- 1860.*REID, JAMES, Banker, Edinburgh.
1882. REID, JOHN J., Advocate, Queen's and Lord Treasurer's Remembrancer in Exchequer for Scotland, 15 Belgrave Place,—*Curator of Museum*.
1880. RICHARDSON, ADAM B., 16 Coates Crescent.
1875. RINTOUL, Lt.-Col. ROBERT, Kinross House, Carlyle Square, London.
1878. RIVETT-CARNAC, J. H., C.I.E., Ghazipur, India.
1883. ROBERTS, ANDREW, 8 Millbrae Cres., Langside, Glasgow.
1885. ROBERTSON, CHARLES, Redfern, Colinton Road.
1879. ROBERTSON, GEORGE, Abbey Gate House, Dunfermline.
1884. ROBERTSON, J. STEWART, Edradynate, Ballinluig, Perthshire.
1880. ROBERTSON, Rev. W. B., D.D., Westfield House, West Calder.
1879. ROBERTSON, W. W., Architect, H.M. Board of Works.
- 1865.*ROBINSON, JOHN RYLEY, LL.D., Westgate, Dewsbury.
1880. ROBSON, WILLIAM, S.S.C., Marchholm, Gillsland Road.
1885. RODGER, Rev. JOHN WYLIE, The Manse, Wolverhampton.
- 1854.*ROGER, JAMES C., The Grange, Higham Hill, Walthamstow, Essex.
- 1850.*ROGERS, Rev. CHARLES, D.D., LL.D., 6 Barnston Terrace.
1871. ROLLO, Right Hon. Lord, Duncrub House, Dunning.
1874. ROMANES, ROBERT, Harryburn, Lauder.
1883. ROSE, Rev. DONALDSON, F.C. Manse, Brechin.
- 1872.*ROSEBERRY, Right Hon. The Earl of, Dalmeny Park,—*Vice-President*.
1876. ROSS, ALEXANDER, Architect, Riverfield, Inverness.
1885. ROSS, ANDREW, S.S.C., 4 Warrender Park Terrace.

1881. ROSS, JOSEPH CARNE, M.D., Shian Lodge, Penzance, Cornwall.
1867. ROSS, Rev. WILLIAM, Cowcaddens Free Church, Clabhan House, Hill Street, Garnethill, Glasgow.
1869. ROSSLYN, Right Hon. The Earl of, Dysart House, Dysart.
1877. SANDERSON, JAMES, Dep.-Inspector-General of Hospitals, Madras Army, 8 Manor Place.
1884. SANDISON, ALEXANDER, St Fillans, by Crieff.
1885. SCOTT, ALEXANDER MALCOLM, 156 St Vincent Street, Glasgow.
1879. SCOTT, Rev. DAVID, F.C. Manse, Saltcoats.
1881. SEMPLE, ANDREW, M.D., 8 Abercromby Place.
- 1848.*SETON, GEORGE, M.A., Advocate, St Bennet's, Greenhill Gardens.
- 1869.*SHAND, Hon. Lord, 30 Heriot Row.
- 1864.*SHAND, ROBERT, 45 Mill Street, Perth.
1873. SHIELDS, JOHN, 11 Melville Street, Perth.
1878. SHIELL, JOHN, Solicitor, 19 Windsor Street, Dundee.
1880. SHIELLS, R. THORNTON, Architect, 4 St Margaret's Road.
1879. SIBBALD, JOHN, M.D., Commissioner in Lunacy, 3 St Margaret's Road.
1879. SIBBALD, JOHN EDWARD, 8 Ettrick Road.
1878. SIDAY, JAMES A., M.D., 20 Heriot Row.
- 1860.*SIM, GEORGE, 9 Lauriston Lane,—*Curator of Coins.*
- 1871.*SIMPSON, ALEX. R., M.D., Professor of Midwifery, University of Edinburgh, 52 Queen Street.
1870. SIMPSON, GEORGE BUCHAN, Seafield, Broughty Ferry.
- 1880.*SIMPSON, ROBERT R., W.S., 8 Bruntsfield Crescent.
1884. SIMPSON, Sir WALTER G., Bart., Advocate, 5 Randolph Cliff.
1883. SINCLAIR, JAMES AUGUSTUS, 20 Bon-Accord Terrace, Aberdeen.
1878. SKERTE, HORACE, Solicitor, Perth.
- 1833.*SKENE, WILLIAM FORBES, LL.D., D.C.L., W.S., 27 Inverleith Row.
1876. SKINNER, WILLIAM, W.S., City Clerk, 35 George Square.
1877. SKIRVING, ADAM, of Croys, Dalbeattie.
1879. SMAIL, JAMES, Secretary, Commercial Bank of Scotland, 7 Bruntsfield Crescent.
1873. SMALL, JOHN, M.A., Librarian to the University, 10 Carlton Terrace.
1880. SMALL, J. W., Architect, Beith, Ayrshire.
1874. SMART, JOHN, R.S.A., 13 Brunswick Street, Hillside.
1877. SMITH, JAMES T., Duloch, Inverkeithing.
1882. SMITH, J. GUTHRIE, Mugdock Castle, Milngavie.
1874. SMITH, J. IRVINE, 20 Great King St.
- 1858.*SMITH, ROBERT MACKAY, 4 Bellevue Crescent.
1866. SMYTH, WILLIAM, of Methven, Methven Castle, Perthshire.
1874. SOUTAR, THOMAS, Solicitor, Crieff.
- 1864.*SOUTAR, WILLIAM SHAW, Banker Blairgowrie.
- 1882.*SOUTHERSK, Right Hon. The Earl of, K.T., Kinnaird Castle, Brechin.
- 1873.*SPOWART, THOMAS, of Broomhead, 7 Coates Crescent.
1882. SPRAGUE, THOMAS B., M.A., 29 Buckingham Terrace.
- 1872.*STAIR, Right Hon. The Earl of, Lochinch, Wigtownshire.
1875. STARKE, JAMES GIBSON, M.A., Advocate, Troqueer Holm, Dumfries.
1885. STEEDMAN, THOMAS, Clydesdale Bank, Kinross.
- 1874.*STEEL, Major GAVIN, 17 Abercromby Place.
1872. STEEL, NEIL, Merchant, Constitution Terrace, Dundee.
- 1872.*STEVENSON, ALEXANDER SHANNAN, Tynemouth.
1875. STEVENSON, JOHN A., M.A., 37 Royal Terrace.
- 1867.*STEVENSON, JOHN J., Architect, 3 Bayswater Hill, London.

- 1855.*STEVENSON, THOMAS, C.E., 17 Heriot Row.
1876. STEWART, Rev. ALEXANDER, LL.D., Manse of Ballachulish, Nether Lochaber.
1883. STEWART, CHARLES, Tigh'n Duin, Killin.
1879. STEWART, CHARLES POYNTZ, Oxford and Cambridge Club, Pall Mall.
1874. STEWART, CHARLES, Sweethope, Musselburgh.
1881. STEWART, JAMES R., Exchequer Chambers.
1880. STEWART, J. A., 6 Constitution Terrace, Dundee.
- 1871.*STEWART, Col. J. H. M. SHAW, R.E., Madras, India.
1876. STEWART, ROBERT BUCHANAN, 11 Crown Terrace, Dowanhill, Glasgow.
1885. STEWART, ROBERT KING, Murdostoun Castle, Newmains, Lanarkshire.
1881. STEWART, T. GRAINGER, M.D., Professor of Practice of Physic and Clinical Medicine, 19 Charlotte Sq.
- 1880.*STIRLING, Capt. PATRICK, Kippenross, Dunblane.
1833. STITT, JOHN J., Woodburn House, Dalkeith.
1882. STORY, Rev. R. HERBERT, D.D., Roseneath, Helensburgh.
1883. STRACHAN, JOHN, M.D., Dollar.
- 1867.*STRATHMORE, Right Hon. The Earl of, Glamis Castle, Forfarshire.
1884. STRONG, W. R., C.A., 9 Belmont Crescent, Hillhead, Glasgow.
- 1850.*STRUTHERS, Rev. JOHN, LL.D., Minister of Prestonpans.
1883. STUART, GEORGE BALLINGAL, M.B., Surgeon, Grenadier Guards, London.
- 1885.*STUART, JAMES MELISS, 11 Queen Victoria Street, London.
1878. STURROCK, JOHN, Engineer-Surveyor, 3 Rustie Place, Dundee.
1882. STURROCK, PETER, Provost of Kilmarnock.
- 1867.*SUTHERLAND, His Grace the Duke of, K.G.
1876. SUTHERLAND, Rev. GEORGE, The Parsonage, Portsoy.
1880. SUTHERLAND, GEORGE MILLER, Solicitor, Wick.
1884. SWALLOW, Rev. H. J., M.A., Brancepeth, Durham.
- 1851.*SWINTON, ARCHIBALD CAMPBELL, of Kimmerghame, LL.D., Advocate.
- 1863.*SWITHINBANK, GEORGE E., LL.D. Ormleigh, Mowbray Road, Upper Norwood, London.
1884. TAIT, GEORGE, 37 Lothian Road.
1873. TAYLOR, Rev. JAMES, D.D., Stonyhill House, Musselburgh.
- 1860.*TAYLOR, JAMES, Starley Hall, Burntisland.
1881. TAYLOR, MICHAEL W., M.D., 202 Earl's Court Road, S. Kensington, London.
1884. TEMPLE, Rev. WILLIAM, M.A., St Margaret's, Forgue, Huntly.
- 1870.*TENNANT, Sir CHARLES, Bart., M.P., of the Glen, Innerleithen.
1874. THOMS, GEORGE HUNTER MACTHOMAS, Advocate, Sheriff of Caithness, Orkney, and Shetland, 13 Charlotte Square.
1885. THOMSON, ALEXANDER, 35 Chester St.
1867. THOMSON, LOCKHART, S.S.C., 114 George Street.
- 1882.*THOMSON, MITCHELL, 7 Carlton Terrace.
- 1875.*THOMSON, Rev. ROBERT, LL.D. Niagara Falls, South Ontario, Canada.
1878. THOMSON, WILLIAM, 23 Great King Street.
1885. TRAILL, WILLIAM, M.D., 83 North St., St Andrews.
- 1865.*TROUP, WILLIAM, Eastwell, Bridge of Allan.
1877. TUKE, JOHN BATTY, M.D., 26 Charlotte Square.
1882. TULLOCH, Rev. JOHN, D.D., LL.D., Principal of the University of St Andrews.
- 1869.*TURNBULL, JOHN, of Abbey St Bathans, W.S., 49 George Square.
1880. TURNER, FREDERICK J., Mansfield Woodhouse, Mansfield, Notts.
- 1865.*TURNER, WILLIAM, M.B., Professor of Anatomy, University of Edinburgh, 6 Elton Terrace.

1881. TWEEDDALE, The Most Honourable The Marquess of, Yester House, Haddington.
1878. URQUHART, JAMES, H.M. General Register House.
1882. USHER, Rev. W. NEVILLE, 27 Walker Street.
- 1862.*VEITCH, GEORGE SETON, Bank of Scotland, Paisley.
1873. VEITCH, JOHN, M.A., LL.D., Professor of Logic, University of Glasgow, The Loaning, Peebles.
1877. VERNON, J. JOHN, Hawick.
1874. WALKER, ALEXANDER, 25 Dee Street, Aberdeen.
- 1859.*WALKER, FOUNTAINE, Ness Castle, Inverness-shire.
1879. WALKER, JAMES, 74 Bath Street, Glasgow.
1881. WALKER, J. RUSSELL, Architect, 45 York Place.
- 1871.*WALKER, PETER GEDDES, 2 Airlie Place, Dundee.
1884. WALKER, R. C., S.S.C., Wingate Place, Newport, Fife.
- 1861.*WALKER, WILLIAM STUART, of Bowland, 125 George Street.
1879. WALLACE, THOMAS D., Rector of High School, Inverness.
1872. WARDEN, ALEXANDER JOHNSTON, West Ferry, Dundee.
1879. WARDEN, Major-Gen. ROBERT, C.B., 4 Lennox Street.
- 1849.*WARE, TITUS HIBBERT, 1 Bell Place, Bowdon, near Altrincham, Lancashire.
1876. WATERSTON, GEORGE, jun., 24 Forth Street.
1870. WATSON, CHARLES, Writer, Duns.
1873. WATSON, JOHN KIPPEN, 14 Blackford Road.
1875. WATSON, WILLIAM, 6 Douglas Crescent.
1884. WATSON, W. L., 7 Wetherley Gardens, South Kensington, London.
- 1856.*WEBSTER, JOHN, Advocate, 42 King Street, Aberdeen.
1879. WEDDERBURN, J. R. M., M.A., W.S., 32 Albany Street.
1877. WEIR, HUGH F., of Kirkhall, Ardrossan.
1877. WELSH, JOHN, S.S.C., 1 Regent Terrace.
- 1872.*WEMYSS AND MARCH, Right Hon. The Earl of, Gosford, Longniddry.
1885. WEMYSS, RANDOLPH ERSKINE, of Wemyss Castle, Fife.
1880. WENLEY, JAMES ADAMS, 5 Drumsheugh Gardens.
1884. WHITE, CECIL, 23 Drummond Place.
1880. WHITE, JOHN FORBES, 107 King Street, Aberdeen.
1869. WHITE, Lieut.-Col. T. P., R.E., 7 Carlton Crescent, Southampton.
1867. WHITE, ROBERT, Procurator-Fiscal, Forfar.
1885. WHITELAW, DAVID, Mansfield House, Musselburgh.
1884. WHYTE, WILLIAM, 8 Merchiston Crescent.
1871. WILLIAMS, WILLIAM EDWARD, Architect, 2 Ludgate Hill, London.
1884. WILLIAMSON, Rev. ALEXANDER, 32 Blacket Place.
1870. WILSON, CHARLES E., LL.D., H.M. Inspector of Schools, 19 Palmerston Place.
1872. WILSON, GEORGE, S.S.C., 16 Minto Street.
1875. WILSON, WILLIAM, West Lodge, Pollockshields.
- 1861.*WILSON, WILLIAM, of Banknock, Stirlingshire.
- 1852.*WISE, THOMAS A., M.D., Beulah Hill, Upper Norwood, London.
- 1863.*WISHART, EDWARD, 1 York Road, Trinity.
1884. WODROW-THOMSON, CHARLES W., C.A., 16 Lennox Street.
1883. WOOD, THOS. A. DOUGLAS, Viewforth, Brunstane Road, Joppa.
1880. WOOD, JOHN MUIR, 22 Belhaven Terrace, Glasgow.
1875. WOODBURN, J., M.A., Drumgrange, Patna, Ayr.

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| <p>1878. WOODWARD, Rev. JOHN, Union Place,
Montrose.</p> <p>1884. WRIGHT, JOHN P., W.S., 44 Palmerston
Place.</p> <p>1867. WRIGHT, Rev. ROBERT, D.D., Starley
Burn House, Burntisland.</p> | <p>1881. YOUNG, ALEXANDER, 9 Lynedoch Pl.
Glasgow.</p> <p>1881. YOUNG, JOHN WILLIAM, W.S., 22
Royal Circus.</p> <p>1878.*YOUNGER, ROBERT, 15 Carlton
Terrace.</p> |
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LIST OF HONORARY MEMBERS
OF THE
SOCIETY OF ANTIQUARIES OF SCOTLAND,
NOVEMBER 30, 1885.

[According to the Laws, the number is limited to TWENTY-FIVE.]

1853.

DANIEL WILSON, LL.D., Principal and Professor of English Literature,
University College, Toronto, Canada.

1855.

Major-General Sir HENRY C. RAWLINSON, K.C.B., D.C.L., 21 Charles
Street, Berkeley Square, London.

1857.

WILLIAM REEVES, D.D., Dean of Armagh, The Rectory, Tynan, Armagh.

1862.

HIS ROYAL HIGHNESS ALBERT EDWARD, PRINCE OF WALES.
5 The PRINCE LOUIS LUCIEN BONAPARTE, 8 Norfolk Terrace, Notting Hill,
London.

1864.

ALEXANDER J. BERESFORD HOPE, LL.D., D.C.L., M.P., Arklow House,
Connaught Place, London.

1865.

Sir HENRY DRYDEN, Bart., Canons Ashby, Byfield, Northamptonshire.

1869.

M. FRANCISQUE MICHEL, Paris.

1871.

GEORGE STEPHENS, LL.D., Professor of the English Language and Literature,
University of Copenhagen.

1874.

10 Sir JOHN LUBBOCK, Bart., LL.D., D.C.L., M.P., High Elms, Farnborough,
Kent.

Sir SAMUEL FERGUSON, Q.C., LL.D., Public Record Office, Dublin.

JOHN EVANS, D.C.L., &c., Nashmills, Hemel-Hempstead.

1877.

Rev. JAMES RAINE, M.A., Hon. Canon of York.

1879.

Rev. CANON WILLIAM GREENWELL, M.A., D.C.L., Durham.

15 AUGUSTUS WOLLASTON FRANKS, M.A., British Museum.

1881.

Dr LUDWIG LINDENSCHMIDT, Mayence.

Professor OLAF RYGH, Christiania.

Professor RUDOLF VIRCHOW, M.D., LL.D., Berlin.

Colonel HENRY YULE, LL.D., Royal Engineers.

1883.

20 Rev. J. COLLINGWOOD BRUCE, LL.D., D.C.L., Newcastle-on-Tyne.

LIST OF THE LADY ASSOCIATES
OF THE
SOCIETY OF ANTIQUARIES OF SCOTLAND,
NOVEMBER 30, 1885.

[According to the Laws, the number is limited to TWENTY-FIVE.]

1870.

The Lady A. A. JOHN SCOTT of Spottiswoode, Berwickshire.

1871.

Miss C. MACLAGAN, Ravenscroft, Stirling.

1873.

The Baroness BURDETT COUTTS.

1874.

Lady DUNBAR of Duffus, Elginshire.

Lady CLARK, Tillypronie, Aberdeenshire.

Miss MARGARET M. STOKES, Dublin.

1883.

Mrs RAMSAY, Kildalton, Islay.

PROCEEDINGS
OF THE
SOCIETY OF ANTIQUARIES OF SCOTLAND.

HUNDRED AND FIFTH SESSION, 1884-5.

ANNIVERSARY MEETING, 1st *December* 1884.

ARTHUR MITCHELL, M.D., LL.D., Vice-President,
in the Chair.

A Ballot having been taken, the following Gentlemen were duly
elected Fellows :—

WALTER BIGGAR BLAIKIE, 22 Heriot Row.
Rev. GEORGE BROWN, Minister of Bendochy.
T. R. BUCHANAN, M.P., 10 Moray Place.
The Lord COLIN CAMPBELL, M.P., Inveraray Castle.
WILLIAM CONNAL, yr. of Solsgirth.
PATRICK F. CONNAL-ROWAN of Meiklewood.
Rev. SHOLTO D. C. DOUGLAS of Douglas Support, Coatbridge.
D. HAY FLEMING, St Andrews.
ROBERT GLEN, 3 North Bank Street.
EDMUND GOLDSMID, Lufra House, Granton.
ANDREW JAMESON, Advocate, 3 St Colme Street.
THOMAS GRAVES LAW, Signet Library.
DAVID STEWART LITTLEJOHN, Solicitor, Dundee.
JOHN MACDONALD, Solicitor, Buckie.
WILLIAM M'DOWALL, 17 Creswell Terrace, Dumfries.

ROBERT NAISMITH, Cross, Stonehouse.
 DAVID NICHOLSON, M.D., Broadmoor, Berks.
 STEWART M'GLASHAN, Sculptor, 1 Brandon Street.
 EDWIN MILLIDGE, Jeweller, 28 Princes Street.
 Rev. JOHN MONTEITH, Minister of Glencairn.
 ROBERT PIRIE, 9 Buckingham Terrace, Glasgow.
 JAMES MELISS STUART of Eriska.
 ROBERT K. STEWART of Murlostoun Castle.
 ALEXANDER THOMSON, 35 Chester Street.

The Office-Bearers for the ensuing year were elected as follows :—

Patron.

HER MAJESTY THE QUEEN.

President.

THE MOST HON. THE MARQUIS OF LOTHIAN, K.T., LL.D.

Vice-Presidents.

ARTHUR MITCHELL, M.D., LL.D.
 The Right Hon. The EARL OF ROSEBERY, LL.D.
 Sir WILLIAM FETTES DOUGLAS, LL.D., P.R.S.A.

Councillors.

Sir J. NOEL-PATON, Kt.,	} <i>Representing the Board of Trustees.</i>	GEORGE SETON, M.A.
LL.D., R.S.A.,		STAIR AGNEW, M.A., C.B.
FRANCIS ABBOTT,		Right. Hon. The EARL OF STAIR.
DAVID DOUGLAS.		ROBERT HERDMAN, R.S.A.
GEORGE HUNTER M. THOMS.		Professor DUNS, D.D.

Secretaries.

JOHN RITCHIE FINDLAY.	
R. W. COCHRAN-PATRICK, LL.D., M.P.	
JOSEPH ANDERSON, LL.D., <i>Assistant Secretary.</i>	
WILLIAM FORBES,	} <i>Secretaries for Foreign Correspondence.</i>
THOMAS DICKSON, H.M. General Register House,	

Treasurer.

GILBERT GOUDIE, 39 Northumberland Street.

Curators of the Museum.

ROBERT CARFRAE.

JOHN J. REID, B.A.

Curator of Coins.

GEORGE SIM.

Librarian.

JOHN TAYLOR BROWN.

The following list of the names of Honorary Members and Fellows who have died since the date of the last Annual Meeting was read by the Secretary :—

Honorary Members.

	Elected
Dr RICHARD LEPSIUS, Berlin,	1860
JOHN HENRY PARKER, C.B., D.C.L., Keeper of the Ashmolean Museum, Oxford,	1869
Dr B. E. HILDEBRAND, Royal Antiquary of Sweden, President of the Royal Academy of Science and Archæology, Stockholm,	1875

Fellows.

JOHN HUTTON BALFOUR, M.D., LL.D., Emeritus Professor of Botany,	1861
His Grace The DUKE OF BUCCLEUCH AND QUEENSBERRY, K.G.,	1845
W. S. COOPER of Failford,	1876
WILLIAM DICKSON, Accountant,	1844
RALPH CARR ELLISON of Dunstanehill, Northumberland,	1866
WALTER FERGUSON,	1848
ALEXANDER HAMILTON, LL.B., W.S., The Elms, Morning-side,	1833

	Elected
CHARLES HENDERSON, S.S.C.,	1881
GEORGE H. M. BINNING-HOME of Argaty, Doune,	1867
DAVID LUMSDEN of Fincastle, Perth,	1883
JAMES MARSHALL, Carlston, Great Western Road, Glasgow,	1880
JOHN WHITEFOORD MACKENZIE, W.S.,	1844
ROBERT I. J. MONTEITH of Carstairs,	1851
ROBERT ANGUS SMITH, LL.D., H.M. Inspector of Alkali Works, Manchester,	1874
HOPE J. STEWART, Stoneyhill House, Musselburgh,	1848

The meeting resolved to record their sense of the loss the Society has sustained in the deaths of these members.

Professor KARL RICHARD LEPSIUS, Principal Librarian of the Royal Library, Berlin, born at Nanneburg in 1810, educated at the public school of Pforta and the Universities of Leipzig and Gottingen, studied Egyptology at Paris and Rome, under Champollion and Bunsen, conducted the well-known expedition to Egypt, 1842-46, and on his return became Professor of Egyptian Archæology at Berlin, and subsequently organised and arranged the magnificent Museum of Egyptian Antiquities there. In 1866 he again visited Egypt. The materials accumulated on these expeditions, and systematised and illustrated in his numerous works, have made a new era in the study of Egyptian Literature and Antiquities.

JOHN HENRY PARKER, C.B., Keeper of the Ashmolean Museum, succeeded his uncle as bookseller at Oxford in 1832, published his well-known *Glossary of Architecture* in 1836, and his elaborate work on the *Domestic Architecture of the Middle Ages* in 1859. He subsequently devoted himself to excavations at Rome, and to the publication of a series of volumes on *The Archæology of Rome*, illustrated by a valuable series of photographs. He was appointed Keeper of the Ashmolean Museum at Oxford in 1870, and was nominated C.B. by Mr Gladstone in 1871.

BROR EMIL HILDEBRAND, Royal Antiquary of Sweden, born in 1806,

became Assistant in the Historical Museum of the University of Lund in 1830, and a few years afterwards went to Stockholm as assistant at the Royal Academy of Arts. In 1837 he received the important appointment of *Riksans antiquarien* or Royal Antiquary of Sweden, implying the directorship of the National Collections and general promotion of the science of Archæology throughout the kingdom,—an office which he held for forty-seven years. He was best known out of Sweden by his numismatic works and his large work on Swedish Seals, which are much valued by scholars.

JOHN HUTTON BALFOUR, M.D., LL.D., born in 1808, appointed Regius Professor of Botany in the University of Edinburgh in 1845, continued actively to discharge the duties of that office, along with those of Director of the Royal Botanic Garden, till 1877, when he retired. He was also for the greater part of that time Dean of the Medical Faculty of the University, and one of the Secretaries of the Royal Society.

WALTER FRANCIS MONTAGU-DOUGLAS SCOTT, fifth Duke of Buccleuch and Queensberry, K.G., took a lively interest in the objects of the Society. In 1862 he succeeded the late Marquis of Breadalbane as President, and continued in office with much acceptance till 1872, when he was succeeded by His Grace the Duke of Sutherland.

RALPH CARR ELLISON of Dunstanhill was remarkable for the zeal and assiduity with which he studied the ancient Anglo-Saxon and cognate languages. He occasionally contributed papers to the Society's *Proceedings*, principally in connection with the interpretation of the ancient inscribed and sculptured monumental stones in Scotland.

JOHN WHITEFOORD MACKENZIE, W.S., well known in legal and literary circles as the possessor of one of the largest and choicest private libraries in the city, was formerly for a considerable time an active office-bearer of the Society, and Vice-President, 1847–49.

ROBERT ANGUS SMITH, Ph.D., LL.D., born near Glasgow in 1817, studied chemistry in Liebig's laboratory at Giessen 1839-41, and settled in Manchester, when he was employed first as a teacher of chemistry, and latterly as Inspector-General of Alkali Works. He was author of many important papers on the subject of Chemical Climatology, a science which he may be said to have created. Having become a Fellow of the Society of Antiquaries of Scotland in 1874, he seldom permitted a session to pass without contributing something of importance to its *Proceedings*. His researches in Argyleshire, which first appeared as communications to the Society, were subsequently re-cast and published as a volume entitled *Loch Etive, or the Sons of Uisneach*. He also wrote a *Memoir of John Dalton and History of the Atomic Theory*; and in conjunction with Mr Thomas Young he edited the collected papers of the distinguished chemist and physicist Thomas Graham.

The Treasurer submitted the audited accounts with a general abstract of the Society's Funds, which was ordered to be printed and circulated among the Fellows.

The Secretary read the Annual Report of the Society to the Board of Trustees, approved by the Council, and ordered to be transmitted to the Lords of H.M. Treasury as follows :—

ANNUAL REPORT of the Society of Antiquaries of Scotland to the Honourable the Board of Trustees for Manufactures in Scotland for the year ending 30th September 1884.

The Museum during the past year has been open as formerly, except during the month of November, when it was closed as usual for cleaning and rearrangement.

The following table shows the number of visitors for each month during the year, distinguishing between day visitors and visitors on the Saturday evenings, viz :—

MONTHS.	DAY VISITORS.	SATURDAY EVENINGS.	TOTAL.
October, . . .	4,956	512	5,468
December, . . .	5,012	739	5,751
January, . . .	14,179	272	14,451
February, . . .	2,808	416	3,224
March, . . .	3,693	521	4,214
April, . . .	6,742	420	7,162
May, . . .	5,156	467	5,623
June, . . .	6,303	247	6,550
July, . . .	17,353	494	17,847
August, . . .	13,043	605	13,648
September, . . .	9,952	506	10,458
Total, . . .	89,197	5,199	94,396
Previous Year, .	86,937	4,948	91,885
Increase, . . .	2,260	251	2,511

During the year there have been presented to the Museum 4181 articles of antiquity; the Donations to the Library amount to 84 volumes of books and pamphlets.

Among the various Donations there may be specially mentioned the valuable Collection of Greek and Roman Antiquities presented by Lady Ruthven, consisting of 488 Vases, &c., 84 Bronzes, and 3487 Coins, Medals, and Tokens.

During the year 3277 articles of antiquity have been also added to the Museum, and 68 volumes of books to the Library, by purchase.

J. R. FINDLAY, *Secretary*.

MONDAY, 8th December 1884.

ARTHUR MITCHELL, M.D., LL.D., Vice-President, in the Chair.

A Ballot having been taken, the following Gentlemen were unanimously elected Fellows :—

JOHN COOPER, Burgh Engineer, Edinburgh.

FRANCIS MAXWELL of Gribton, Dumfries.

ALEXANDER MALCOLM SCOTT, 156 St Vincent Street, Glasgow.

The following articles, acquired by the Purchase Committee for the Museum and Library, during the recess from 8th June to 30th November 1884, were exhibited to the meeting :—

1. Collection of Flint Implements, &c., consisting chiefly of Scrapers and Flakes, worked and unworked, from Drainie, Elginshire, amounting to about 80 specimens.

2. Polished Whetstone of quartzite, $2\frac{3}{4}$ inches in length, quadrangular, with slightly rounded ends, from Cairnsmore, parish of Kells, Kirkcudbrightshire.

3. Iron Collar, jointed in the centre and armed with spikes pointing to the inside, supposed to have been a "Witches' Bridle."

Twelve pairs of Shoe-Buckles, some gilt and set with pastes.

4. Keg of Butter, the keg hollowed out of a single piece of wood, 14 inches high and 13 inches diameter, found in a moss in the neighbourhood of Kyleakin, Skye.

Caldron of thin bronze, semi-globular in shape, measuring 20 inches wide and 10 inches high, found in the same moss near Kyleakin.

5. Highland Brooch of silver, slightly convex, $2\frac{3}{4}$ inches diameter, ornamented with stags' heads and foliage engraved, and having on the back the initials L M, I M'R, rudely engraved, with the stamps T B, a camel, and INS for Inverness.

6. Highland Pistol, 12 inches in length, with brass barrel and inlaid stock of steel, the butt scroll-ended, and having on each side an oval plate of silver, with engraved motto now illegible.

7. Enamelled Cup or Patera of bronze, found in Linlithgowshire.
[See the subsequent communication by Dr Joseph Anderson.]

8. Polished Celt of felstone, $6\frac{3}{4}$ inches in length by $2\frac{1}{8}$ inches across the cutting face, unsymmetrical in outline, having a considerable bulge on one side, from Lamington, Lanarkshire.

Old iron Key, also from Lamington.

9. Bronze Flanged Celt or Palstave, 5 inches in length, $1\frac{3}{4}$ inches across the cutting face. It has a well-developed stop-ridge, and the flanges are hammered over from the sides. Said to have been found in the west of Scotland, but the precise locality unknown.

Two spiral Rings, formed of a band of thin flat bronze.

Four Fibulæ, one of bronze wire, wound into a double spiral, similar to those found in Central Europe, and the other three bow-shaped, similar to many continental specimens.

Small penannular Ring of bronze.

Small circular Ring of bronze, with projecting knobs.

These objects are said to have been found in the west of Scotland, but may probably have come from the Continent.

10. Celt of chipped flint, with ground cutting edge, $5\frac{3}{4}$ long by 2 inches across the cutting face, from the neighbourhood of Beaully, Ross-shire.

11. Scottish Pistol with wooden stock.

Small Powder Flask of horn.

Medal, in commemoration of the Victory of Admiral Vernon over the Spanish Fleet at Porto Bello, 22nd November 1739.

12. Stone Crusie-Mould, a roughly triangular boulder of gneiss, measuring about 12 inches along each side and 7 inches in thickness, with two hollows corresponding to the upper and under shells of an iron Crusie or Oil-lamp, from North Uist.

13. Polished Celt of serpentine, $2\frac{1}{2}$ inches in length by 2 inches across the cutting face, and not exceeding $\frac{1}{2}$ inch in thickness, from Inverness-shire.

Four stone Whorls—one ornamented with concentric circles, and another with roughly scratched radiating lines, the others plain—from Inverness-shire.

Luckenbooth Brooch of silver, a crowned heart, with the initials A. D. on the back.

Small Steel, with a leather pocket attached for the Flint, as used by the Hill Tribes of the Himalayas.

14. Collection, chiefly of Flint Implements and Flakes, worked and unworked, the implements including Scrapers, Knives, Saws, Borers, Arrow-heads, &c.,—amounting in all to upwards of 1000 specimens, from the Culbin Sands. (See figs. 1 and 2.)

15. Collection from the Findhorn Sands, amounting in all to upwards of 1200 specimens, and consisting chiefly of Flint Arrow-heads, Implements and Flakes, worked and unworked.

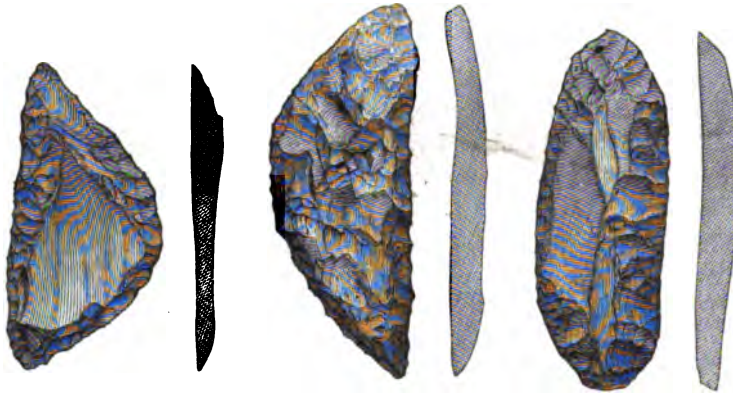


Fig. 1. Flint Knives from the Culbin Sands (actual size).

16. Flag of embroidered silk, yellow, with the Union Jack in the corner. In the centre within a wreath of the Rose, Thistle, and Shamrock, are the initials G. R., with the crown over the wreath, and underneath the motto *NEMO ME IMPUNE LACESSET*; on the other side the arms of Glasgow, surrounded by a wreath of the Thistle and the Rose, with the motto *LET GLASGOW FLOURISH*, and in the upper part of the field the words, 1st REGIMENT GLASGOW VOLUNTEERS.

17. Polished Celt of greenstone, 7 inches in length by 2½ inches

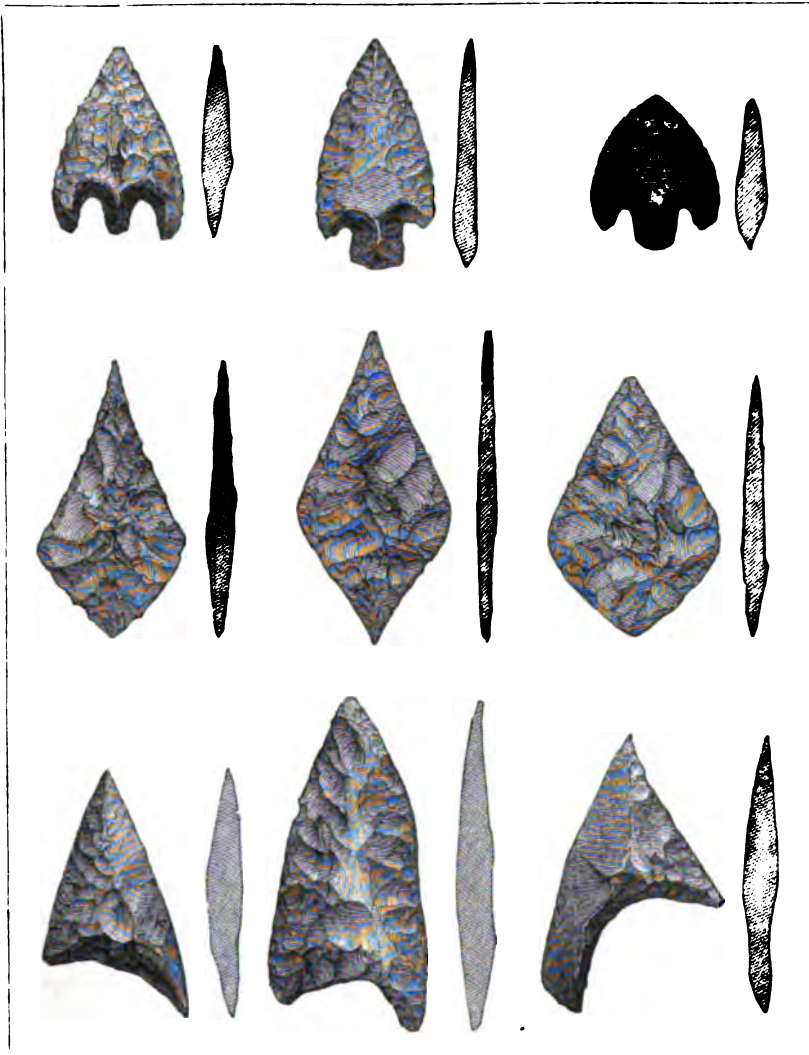


Fig. 2. Flint Arrow-heads from the Culbin Sands (actual size).

across the cutting face, tapering to a conically rounded butt, found at Hermiston, Mid-Lothian.

18. *Scottish History and Literature, to the Period of the Reformation.* By John M. Ross, LL.D. 8vo. Glasgow, 1884.

19. *Arneth's Gold Ornaments in the Vienna Museum*, folio. 1832.

20. *The Aberdeen Printers, Edward Raban to James Nicol, 1620.* By J. P. Edmond. 8vo. Aberdeen, 1884.

21. *Nenia Britannica, or a Sepulchral History of Great Britain, from the Earliest Period to the Establishment of Christianity.* By Rev. James Douglas. folio. London, 1793.

22. *Orkney Documents, &c.*, MS. copied by George Petrie—*Extracts from Minutes of the Sheriff and Justiciary Court of Orkney, held at Birsay 11th November 1629 ; Sute Roll of the County of Orkney, 1711.*

There were exhibited through Dr ARTHUR MITCHELL, V.P. :—

(1) By the MARQUIS OF LORNE.

Annular Brooch of brass, 3 inches diameter, formed of a flat circlet of brass $\frac{1}{4}$ inch in width. The pin, which is as usual somewhat shorter than the extreme diameter of the brooch, is slit in the head so as to be easily slipped on to the narrow portion of the circlet, on which it moves freely. The surface of the annular band forming the body of the brooch is ornamented with engraved figures of animals, and a simulated form of black letter inscription treated as part of the ornamentation. The brooch (see fig. 3) was found in the sands of Barrapol, in the island of Tiree.

(2.) By the Lady Constance Campbell.

Full-sized Drawings of a Hoard of Bronze Objects, found together in Kintyre, and now at Inveraray Castle, consisting of—

1. Bronze Spear-head, 13 inches in length, the blade leaf-shaped, unpierced, and measuring $2\frac{3}{8}$ inches across the widest part. The socket, which extends $3\frac{3}{8}$ inches beyond the base of the blade, is $1\frac{1}{2}$ inch diameter at the butt, and pierced with two rivet holes in the plane of the blade a little below its junction with the socket.

2. Bronze Sword, leaf-shaped, 24 inches in length, the blade

measuring $1\frac{7}{8}$ inch extreme width at about two-thirds of its length, and narrowing to $1\frac{1}{4}$ inch between the widest part and the junction with the hilt, which is pierced by two rivet holes in the wings and three in the handle plate, the sides of which are nearly straight.

3. Bronze Sword, leaf-shaped, $25\frac{1}{2}$ inches in length, greatest width of the blade $1\frac{7}{8}$ inches, least width between the widest part and the hilt $1\frac{1}{4}$ inch, the hilt pierced by two rivet holes in the wings and three in the handle-plate, the sides of which are curved slightly outwards.



Fig. 3. Annular Brooch of Brass, found in Tiree (actual size).

4. Bronze Sword, leaf-shaped, $21\frac{3}{4}$ inches in length, greatest width of the blade $1\frac{3}{4}$ inch, least width between the widest part and the hilt $1\frac{1}{8}$ inch, the hilt pierced with two rivet holes in the wings and two in the handle-plate, the sides of which curve slightly outwards.

5. Bronze Sword, broken across the blade, $25\frac{1}{8}$ inches in length, greatest width of the blade 2 inches, least width between the widest

part and the hilt $1\frac{1}{2}$ inch, the hilt pierced by two rivet holes in the wings and two in the handle-plate.

6. Portion of the blade of a bronze Sword, 17 inches in length.

7. Bronze Scabbard-End of the form shown in the description of a similar find of bronze swords at Cauldhame, near Brechin, in the *Proceedings*, vol. i. p. 181. It is slightly broken, and measures $6\frac{3}{4}$ inches in length.

These drawings have since been presented to the Society.

The following Communications were read :—

I.

NOTICE OF EXCAVATIONS AT STENABRECK AND HOWMAE, IN NORTH RONALDSAY, ORKNEY. BY DR WILLIAM TRAILL OF WOODWICK AND NORTH RONALDSAY, CORR. MEM. S.A. SCOT.

The Mound of Stenabreck is situated in North Ronaldsay, the most northerly of the Orkney Isles (known, I daresay, to many members of this Society as the island in which the Broch of Burrian was discovered). It is about a mile N.N.E. from Burrian, and like it, situated close to the sea-shore.

We had long suspected, from its appearance, and also from the presence of a layer of ashes exposed on the sea face of the mound, that it was an artificial one; and when walking one evening on the beach below, we were confirmed in this impression by finding a portion of the shank bone of a sheep, sawn across, as if for the purpose of making beads of it. We also observed many dead specimens of the *Helix nemoralis*, a land mollusc which is now extinct in the island, although its shells are found so abundantly in most of the prehistoric structures, as to suggest that it may have been used as an article of food by the occupants. We commenced operations on the 9th August 1883, by getting two men to dig a trench near the top of the mound towards the sea. This trench was dug about 24 feet long, 4 feet wide, and 2 feet

deep, but no sign of building was discovered, although we came upon numerous flat stones which looked like building stones.

The following day a new portion was dug to the south of this trench, but without finding anything.

The mound being more extensive to the north, we then dug a trench at right angles to the first one, and leading from it in a northern direction; we were rewarded, after two days' labour, by coming upon the face of the southern wall of room A. in the plan. The work of tracing out the rest of the building was then quite simple. The letters marked on the several chambers in the annexed ground plan (fig. 1), show the order in which they were excavated. The sections (figs. 2 and 3) on the lines indicated in the ground plan show the elevation of the walls. Room A. is nearly of a rectangular form, 11 feet long and 6 feet wide. In the southern wall are three square holes or presses; the eastern one is 1 foot 3 inches wide, 1 foot 5 inches high, and extends back into the wall 1 foot 3 inches. In this press was found a long polished bone of, I think, a deer. There are no actual signs of workmanship on it, but its articulating extremities are much worn or rubbed away, and the high polish on it points to its having been very considerably handled. What its use may have been, is of course a mere matter of conjecture; but its appearance, and the place in which it was found, leave no room for doubt as to its having been utilised as an implement of some sort. The next press was much smaller, being only 7 inches wide by 9 inches high, and extending 1 foot into the wall. In this we found one valve of a large mussel shell, and also of a fine specimen of the *Cyprina islandica*. From their position they had evidently been put aside for use—possibly as lamps or ladles. The third press was empty; it was 1 foot 5 inches wide, by 1 foot 9 inches high, and 1 foot 2 inches back into the wall; it differed from the others in having the sides and back built with stones *laid flat*, the others being lined by flat stones set on edge.

At the east end of the room was a long flat stone, placed as if for a seat. It was 3 feet long, 8 inches wide, and $1\frac{1}{2}$ inch thick, laid on its flat side, a few inches above the floor; below this stone we found some fragments of pottery and a rounded flat stone about 4 inches in diameter,

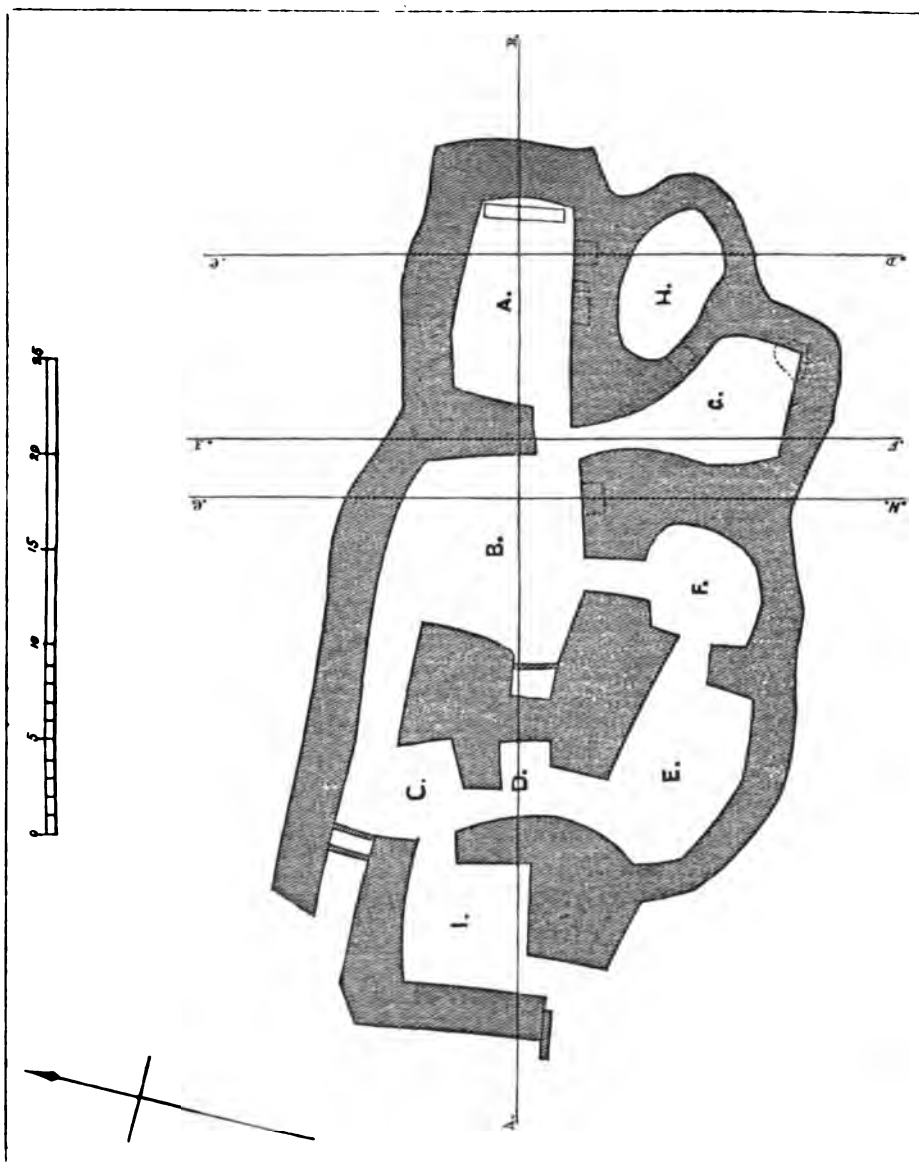


Fig. 1. Ground Plan of Ancient Structure at Stenabreck, North Ronaldsay.

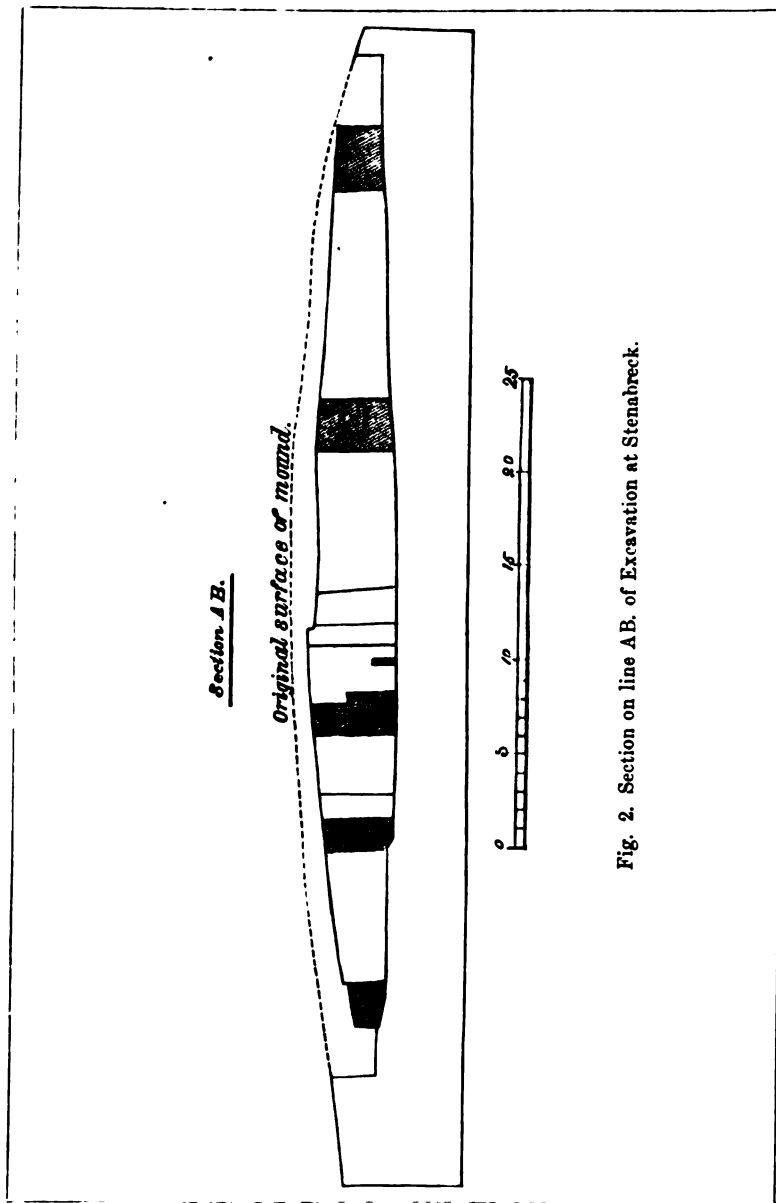


Fig. 2. Section on line A B. of Excavation at Stenabreck.

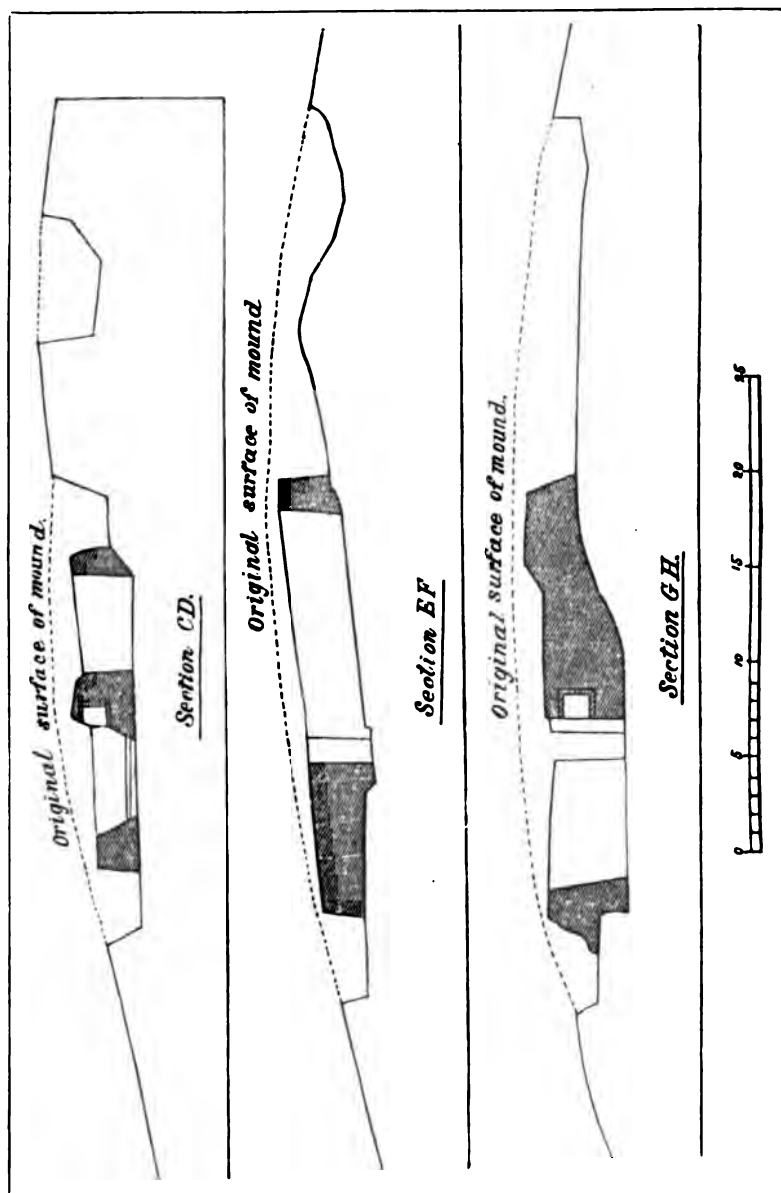


Fig. 3. Sections of Excavation at Stenabreck.

which has apparently been used as a cover for a pot; it is blackened round the edge as if by fire or smoke, and a small projection is left, perhaps intentionally, to serve the purpose of a handle. Portions of several clay vessels were found in this room, principally along the edges of the north and south walls, and close to the floor, which in this, as well as all the other rooms, was roughly paved with flat stones.

We also found a spindle whorl of stone, and two or three fragments of iron, so much oxidised as to render it almost impossible to say what they have been. One piece, however, much resembles the blade of a knife, of which the haft seems to have been inserted into a bone or horn handle, some remains of which may still be seen attached to the oxide. Another piece is shaped something like a hook. At the west end of room A. we found a doorway or passage leading into room B., which is about 10 feet square, and has three passages leading from it into rooms G., F., and C. respectively. The passage into C. is $6\frac{1}{2}$ feet long, and between 2 and 3 feet wide. In the portion of wall separating the passages into room G. and room F. there is a press similar to those already described in room A.; the dimensions are $1\frac{1}{4}$ foot square on the flat and 1 foot 7 inches high. At the south-west corner there is a recess about 2 feet square, which was perhaps a fireplace; it is partitioned off from the main room by a stone on edge rather more than a foot high. Nothing was found in this room except fragments of earthen cooking pots.

Room C., which was 6 feet long by 5 feet wide, has four entrances—(1) from the east, (2) from D. on the south, (3) from room I. on the west, and (4) from the outside, also on the west. This last appears to have been the main entrance to the building, and we have every reason for believing that it was closed by a wooden door. A flat stone on edge with its upper surface nearly level with the floor defines the position of the doorway, and at the north end of this stone, touching it and at the inner side of it, was a water-worn boulder of red freestone embedded in the earth. This stone was a flattish oval; long diameter about $7\frac{1}{2}$ inches, and short diameter about 5 inches, and had near the centre of it a hollow about $1\frac{1}{2}$ inch deep, and the same or rather more in diameter. Round about the hollow there were concentric marks and

scratches, occupying about a quadrant of a circle, and corresponding exactly with the marks which would be made by the swinging of a heavy rough door of hard wood if the door-post were embedded in the hollow of the soft freestone. This idea is strengthened by the discovery, within a few feet of the place, of a rough key (fig. 4) made of the bone of a whale. Few persons perhaps would recognise a key in this curiously carved specimen of bone, but a comparison of it with a wooden key of oak belonging to a modern North Ronaldsay lock will satisfy any one of the identity of their uses. To make this as clear as possible, I cannot do better than quote the following description of a wooden lock from North Ronaldsay, now in the Museum:¹—



Fig. 4. Key made of the Bone of a Whale.

This lock consists of the following combination of fixed and movable parts. In the first place, there is the fixed frame, which is fastened to the outside of the door by means of four stout wooden pins. The shape of the frame will be best understood by the perspective view shown in fig. 5. It is a solid block of wood, 1 foot long by $4\frac{1}{2}$ inches broad by 2 inches thick, which is hollowed out to receive the movable parts thus; four vertical grooves, 1 inch deep and $\frac{1}{2}$ inch wide, are cut to receive the tumblers at equal distances apart. A horizontal groove, 2 inches broad by 1 inch deep, is formed at the bottom of the tumbler grooves, to receive the bolt. There is a second horizontal groove, $1\frac{1}{4}$ inch broad by $\frac{3}{8}$ inch deep, higher up, just large enough to allow the key to be inserted. Now come the movable parts. The bolt is 1 foot long by 2 inches by 1 inch, and has four notches cut in its upper surface for the ends of the tumblers to fall into. The key is 6 inches long by 1 inch by $\frac{1}{2}$ inch, and has four lifting teeth on the top corresponding to each of the four tumblers. The tumblers are rectangular pieces of wood, 6 inches long by 1 inch by $\frac{1}{2}$ inch, having notches cut in the sides to enable them to be lifted by means of the key. The working of the lock is as follows:—When the tumblers are resting by their own weight in the notches of the bolt it is impossible to move it.

¹ This extract is taken from an admirable paper on Wooden Locks, by Mr J. Romilly Allen, in the *Proceedings* of this Society, vol. xiv.

The tumblers are lifted by means of the key, each tooth of which when it is inserted comes just under each one of the notches before described. The key is held with one hand and pushed first forwards as far as it will go, and then moved vertically upwards to the extent of the depth of the teeth of the key (which is equal to the throw of the tumblers). When this has been done the bolt is drawn with the other hand.

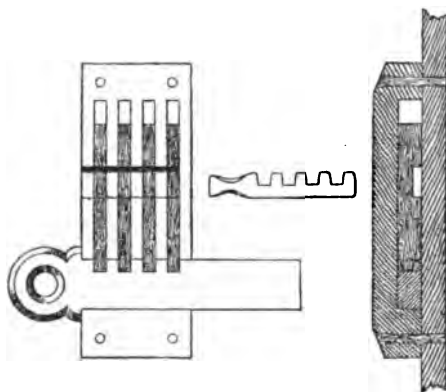


Fig. 5. Wooden Lock and Key, from North Ronaldsay.

These locks are known to be of considerable antiquity; they are now as far as Orkney, or I believe Scotland, is concerned, peculiar to the island, and they have in all probability been in use in North Ronaldsay with hardly any modifications or improvement since the time that they were invented or introduced by the primitive inhabitants of the place.

Room D. is hardly more than a recess in the eastern side of the passage connecting C. with E. Room E. is about 10 feet long by 5 or 6 wide, and has a passage into F. which is of a very irregular shape, neither round nor square, but from 5 to 6 feet across, whichever way it is measured.

On lifting the pavement of this room just where it emerges from room E., we came across a mass of consolidated sand, which seems to have been stuck together by some cementing material which had run

down the crevices between the paving stones. I may here mention that we found dry *shell* sand almost immediately below the paving stones in all the rooms. The stones were all lifted, and digging continued as long as ashes or black earth was found, but this seldom extended more than a few inches below the pavement. The only entrance to room G. is from the passage connecting A. and B.

It will be seen from the section C. D. that this floor was not level, but sloped upwards from the entrance to the room. It is not easy to say either where the passage ends and the room begins, as the former gradually widens out into a sort of pear-shaped room.

In the doorway of the room we picked up a rough bone pin, the only one found during the excavations. The rooms remaining to be described

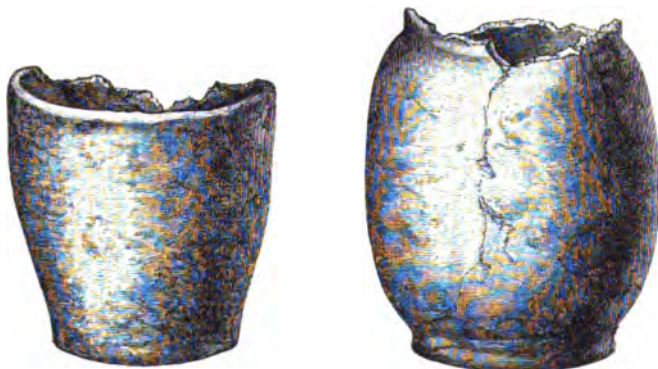


Fig. 6. Vessels of burnt Clay, found in the Chambers at Stenabreck (4 and 5½ inches high).

are H. and I. The former is curious, as having no apparent entrance; it is in shape an irregular oval, 8 feet long by 4½ wide; and in the wall dividing it from G. there is a press, 1 foot 2 inches wide, 1 foot high, and 1 foot 6 inches deep. Room I. is a sort of porch to the building; it is nearly square, being 6½ feet long by 7 feet wide. It has one entrance from the outside, and a passage into C.

Having thus described each chamber in detail, it may be as well to notice some peculiarities of the building as a whole. A glance at the

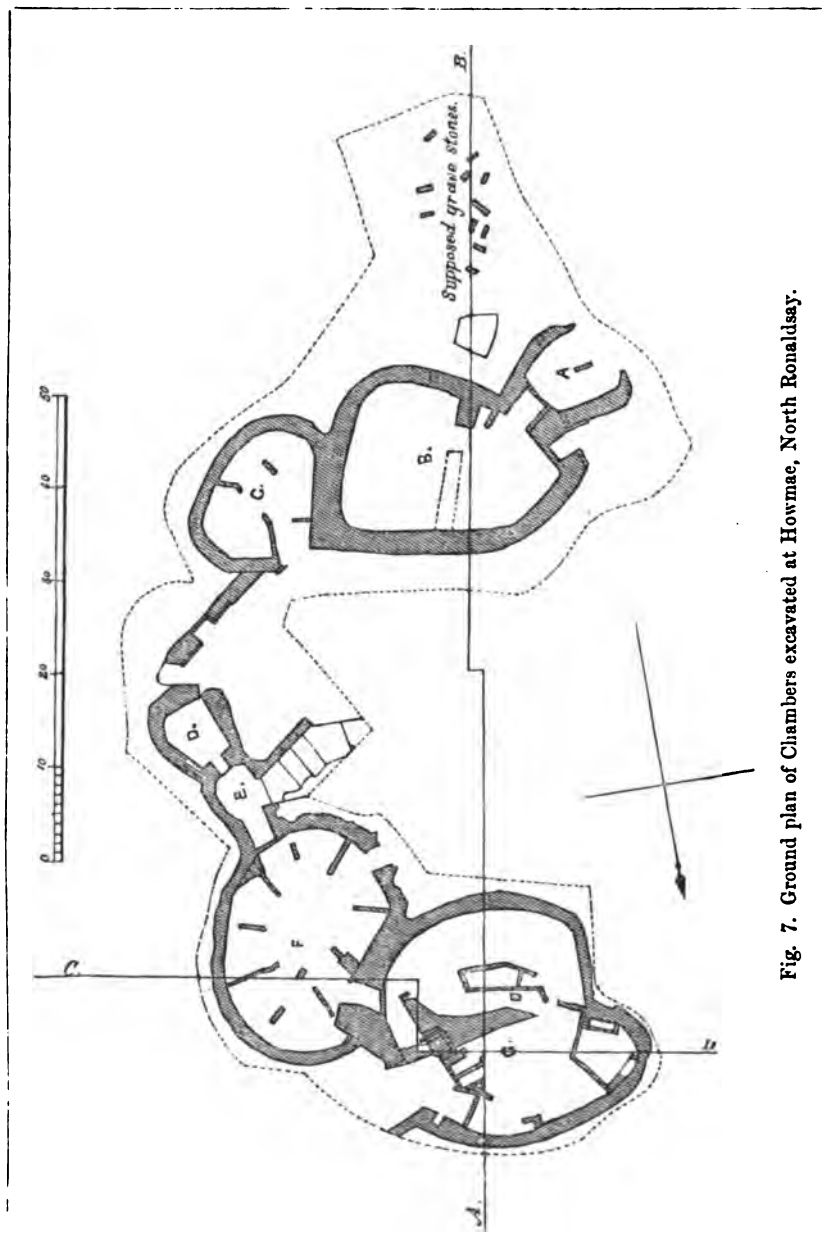
plan will show the extraordinary thickness and massiveness of the walls, not so much of the outside walls as some of the division walls, and other bits of building altogether detached from the outer walls. In fact, the walls take up more space than the chambers, the area occupied by the walls of the building being 501 square feet, whereas the total area of all the rooms does not exceed 463 square feet. I may add, that although the *inner* face of the outside wall was comparatively smooth, its *outer* surface was so roughly put together as to lead us to infer that it had originally been supported or banked up with earth and turf.

From the fragments of the pottery found in the floors of the chambers, eight vessels have been partially reconstructed. Two of the most entire of these are shown in fig. 6. They are coarsely made and imperfectly fired, and appear to belong rather to the more recent varieties of home-made pottery, of which examples are still to be found in the Western Isles, than to the class of vessels and style of manufacture commonly found in the brochs. The whole circumstances of the structure and its contents indicate that it belongs to a period less remote than that of the brochs. In point of fact, it seems to present the typical characteristics of the old Orkney house.

II. HOWMAE.

This mound, known locally as Howmae, is situated in the island of North Ronaldsay, about 5 furlongs N.N.W. from Burrian, and about $1\frac{3}{4}$ mile in a south-westerly direction from Stenabreck. The sketch map of the island now before you will show the relative positions of the three tumuli. Like both Burrian and Stenabreck, this mound is close to the sea-beach, the top being about 20 feet above the sea-level at ordinary high water, and about 10 feet above the general level of the links in which it is situated. It extends about 250 feet N. and S., and about 150 feet E. and W.

We commenced the excavations on the 22nd July 1884 by digging a trench in a direction running E. and W. through about the highest part of the mound. After a couple of days we came upon a number of flat stones on edge, fixed in the sand by means of others driven in alongside of them, one or two on each side. The stones resembled rude gravestones; and it will be seen from the plan (fig. 7) that most of them



were in pairs, one opposite the other, and 2 or 3 feet apart. They measured from 1 to 3 feet or rather more in height, 1 to 2 feet wide, and 2 to 3½ inches thick. The soil in which they stood seemed almost pure shell sand, and on digging underneath a few of the stones we found a thin layer of a whitish substance, resembling lime or wood ashes, of which a small portion is on the table for examination.

Changing the direction of our digging now to a northerly one, we came in a few days upon the outside curve of room B., having found amongst the ashes outside several bone pins and borers, a quantity of pottery in fragments coarse and unornamented, several stone pounders, and one or two pieces of pumice-stone. We then proceeded to clear out room B., finding in it little of interest except broken pottery, which was in considerable quantity.

The room is of an irregular shape, difficult to describe, and reference to the plan will be necessary. I have marked in dotted lines the position of a *partition* which I believe existed, though the wall, if it really did exist, was in ruins. A small piece of building will be seen to project about 3 feet from the south wall of the room, and opposite to it the north wall showed by some gaps and projections that a wall had been built into it. There is a small recess at the S.W. end of the room about 3 feet square, probably a fireplace; the back of it is a large stone on edge about 3 feet high, which forms one side of the small room A. The south wall of this room was partly faced on the inside by two large stones on edge, built into the wall.

There was a stone on end about 1½ foot high in the centre of the room, for what purpose it is not apparent, unless it had originally been much higher, and used for supporting the roof. Proceeding to trace out the back or outside of room B., we came upon C., and cleared it out, finding it partitioned off by flat stones on edge 2 to 3 feet high, as shown on the plan. Several bone pins and a quantity of broken pottery were found here. For some days after this we had our labour for nothing, finding only detached pieces of wall or nothing at all. Eventually, however, we struck upon room D., the floor of which was 7 or 8 feet below the surface of the mound. This chamber was 6½ feet long, by 4 or 5 wide, two of the sides being faced by entire stones on edge,

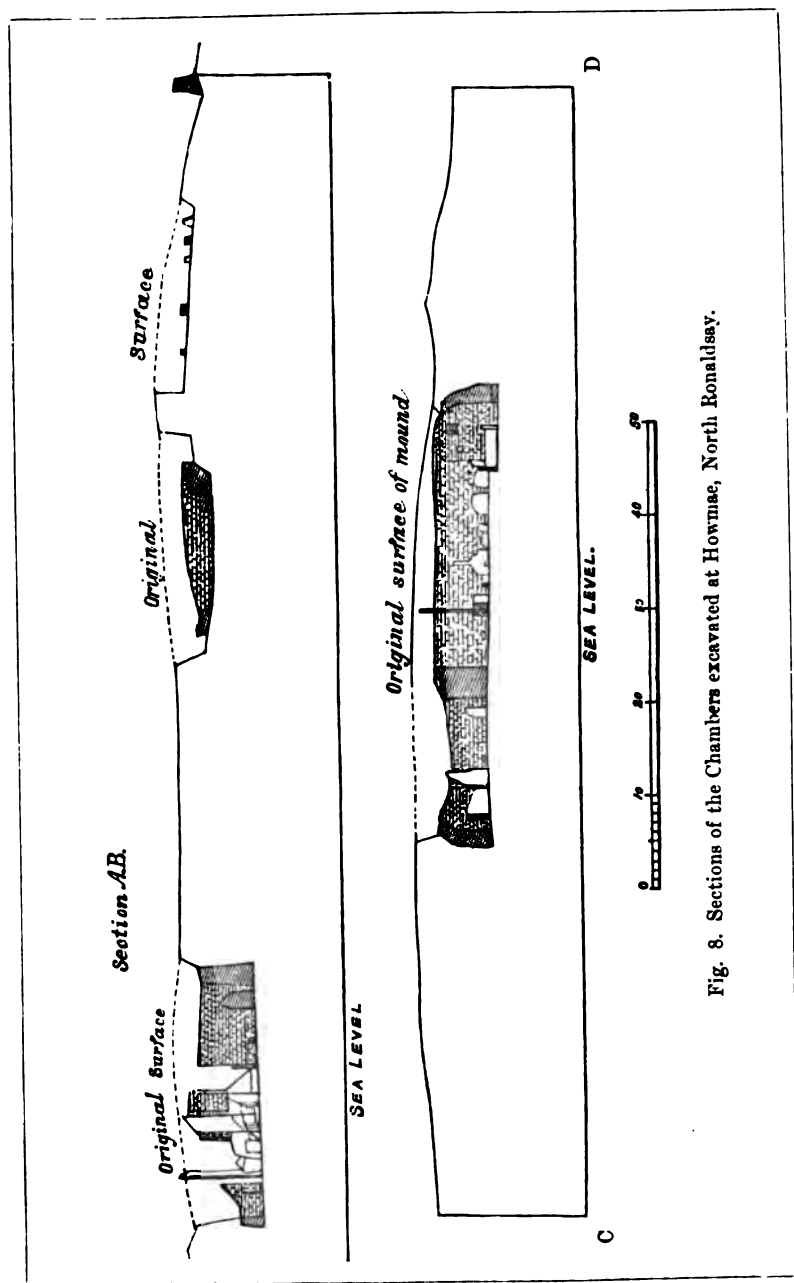


Fig. 8. Sections of the Chambers excavated at Howmae, North Ronaldsay.

running the whole length of the walls, and extending upwards from the floor for about 2 feet. Above this the building was in the ordinary fashion, the stones being laid flat. In this room we found a good specimen of a long-handled comb, made of the bone of a whale. It was shaped something like a human hand, and was almost perfect, having 13 teeth left out of the original 14. Its length was nearly 5 inches, its width $2\frac{1}{2}$ inches, the teeth ranging from $\frac{3}{4}$ inch to $1\frac{1}{3}$ inch in length. It was slightly ornamented, a curved groove being cut on the handle, just below the teeth, with its convexity towards the teeth, and two diagonal lines from the extreme end of the comb were drawn from the corners till they met and slightly crossed each other near the middle of the comb. We also found in this room a leg bone, apparently of a

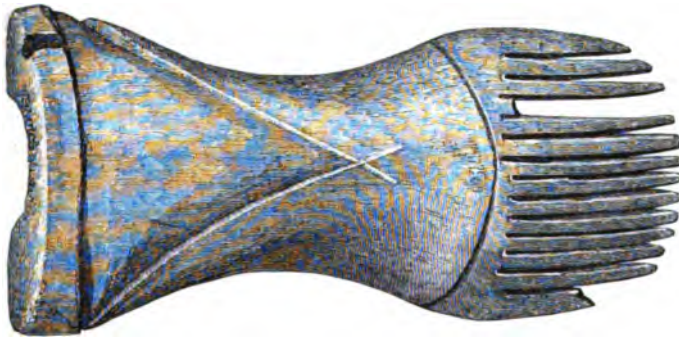


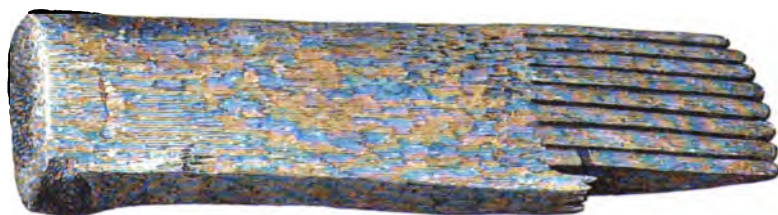
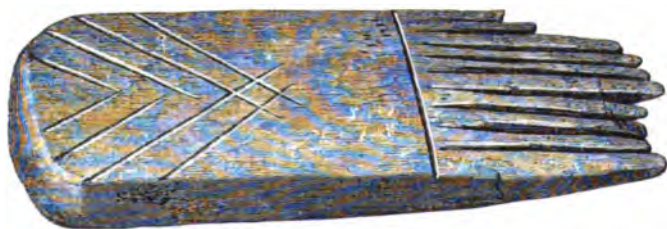
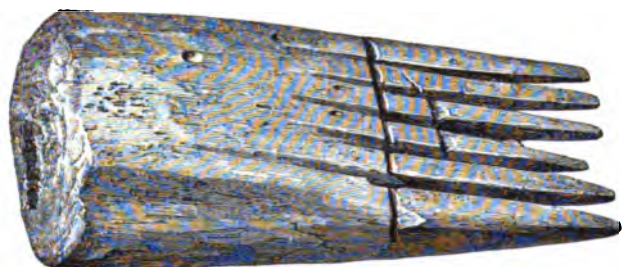
Fig. 9. Long-handled Comb, found in Chamber D. at Howmae.
($5\frac{1}{8}$ inches in length).

pig, sawn across for some purpose or other, a small round bone about $1\frac{3}{4}$ inch in diameter, perforated nearly through by a round hole about $\frac{1}{4}$ inch in diameter, and much polished on one side as if by constant rubbing. The use of this bone is unknown. There was also a small bone of a whale about $6\frac{1}{2}$ inches long, perforated at one end with a hole about $\frac{1}{3}$ inch in diameter. In the same chamber we found, lying side by side, as if they had been tied up in a bundle, seven shank bones of a small kind of sheep. This was a favourite bone for making boring implements of, and it was probably with that intention that they had been laid

together. Passing from chamber D. we proceeded to clear out E. This work was very tedious, owing to the depth of the floor level below the surface of the mound being nearly 10 feet. About 2 or 3 feet down from the surface the soil was sandy, but below that it was rubbish, consisting of stones that had fallen from the upper part of the walls, ashes, and black earth. The chamber was only about $5\frac{1}{2}$ feet by 4. There was a drop of about $1\frac{1}{2}$ foot into E. from D. A doorway led from the south-west into some chamber not explored till afterwards, and then but partially; another led into F. by a passage about 4 feet long and $2\frac{1}{2}$ feet wide. On lifting one of the paving stones in E. we found what appeared to be a built drain running across the chamber from below the wall on north-east side in direction of the passage to the south-west.

We could not thoroughly explore this drain, as some of the paving stones were fixed in below the walls of the chamber, and could only have been removed by breaking them, we therefore left this alone in the meantime, but I shall have more to say concerning it further on. We found in this room a bone needle or bodkin 4 inches long—broken across at the eye; a fine pointed awl of bone, 5 inches in length; and two other awls or borers of the same kind of sheep shank bones, described as having been found in chamber D. We also found a skull of an otter in good preservation, and several rat skulls. This latter discovery is of some interest, as there are now no rats on the island. We then passed into room F., the floor of which is on the same level as E. It is an irregular oval, 24 feet long and 15 broad, and, as will be seen from the plan, is divided off into stalls by partitions of flagstones set on edge. These stones were from 2 to 4 feet in height, but some of them had been higher and were broken; they all seemed to have been rudely dressed on the edges, which were also smoothed considerably as if by cattle rubbing against them. Two of them had holes bored through them about $1\frac{1}{2}$ inch in diameter, and about $1\frac{1}{2}$ foot from the ground. In this room we found some fragments of pottery, several rude stone flakes or knives made of flagstone, four bone awls and a bit of a fifth, and seven small bone pins, also portions of several otter skulls and one skull of a crow. The walls of the room averaged about $6\frac{1}{2}$ feet in height, their tops being about $2\frac{1}{2}$ feet below the surface of the mound.

The curved walls were built with the stones gradually overlapping those below them so as to converge inwards. This convergence was at about the rate of $1\frac{1}{2}$ foot in 6 feet of height. A doorway led from the south-west end of this room, but we did not explore to see where it led, having, more by chance than for any particular reason, selected the passage into apartment G. This room proved to be the most interesting of the whole, both from the greater number and variety of the implements found, and from the fact of a secondary occupation of it being clearly established. We at first thought that there was a partition wall running nearly east and west, and dividing the room into two almost equal parts; but on digging down along the sides of it for about 4 feet we ascertained that it was founded upon rubbish, probably the ruins of the part of the walls of room G. which had fallen in during, or after, a previous occupation. It was in clearing away this rubbish, which was about $3\frac{1}{2}$ feet thick, that we found a number of curious flat implements of considerable size made from the bones of a whale. We also found three long handled combs (figs. 10, 11, 12), not so fine as that from chamber D., but tolerably perfect, and interesting from their being of a different type from it. The heavy wedge-shaped one with six teeth is, I think, different in form from any in the Museum collection at present. If (as I believe is pretty well established) these combs were used in weaving, the great strength of the teeth in this specimen, and their distance apart, would perhaps indicate some unusually coarse fibre that was being woven; while the comb with the longest handle has the teeth very close together, and was probably used for some much finer material. We also found, amongst the rubbish, pieces of a cup or vessel of some sort, made from the vertebra of a whale, two bone awls, one small scraper, a shank bone of a sheep with two marks of a blunt knife or saw on it, several bone pins, and two rounded stones about $\frac{1}{2}$ a foot in diameter, and nearly 2 inches thick, each with a hole $\frac{3}{4}$ inch in diameter bored through the centre. This was the largest room discovered, being somewhat circular in shape with an average diameter of 25 feet. On the eastern side of the room we found two long flat stones set on end with their flat sides parallel to the face of the wall, and 3 or 4 feet from it. One stone was 8 feet 8 inches high, and the other



Figs. 10, 11, 12. Three long-handled Combs of Bone, found in Chamber E. at Howmae ($\frac{1}{3}$ of actual size).

exactly 8 feet above the floor level; they were over 2 feet wide and 3 to 4 inches thick, and they stood about $7\frac{1}{2}$ feet apart from centre to centre. One stone was shored up or supported by masonry built between it and the wall, and both are also kept in position by smaller stones on edge driven in round them at different angles. One long flat stone running between the two high ones forms the back of three fireplaces, which are separated from each other by more flat stones on edge at right angles to the back.

There is a sort of curved recess at the north-west of the room, partitioned off from the rest by two flat stones on edge, meeting each other at an obtuse angle. These stones were about 1 foot high, reckoning from the floor of the main room, or about 2 feet above the floor of the small compartment, which was at a lower level than the rest.

Inside the space thus partitioned off was found a cist about 3 feet long, 1 foot wide and about $1\frac{1}{2}$ deep, formed by flat stones on edge, projecting from the wall, and joined by another which formed the front; immediately above the cist were two small presses in the wall, one about $1\frac{1}{2}$ foot square, and the other about 9 inches.

To the north of these, supported by a flat stone on edge at one end, and by a small block of masonry at the other, was laid a flat stone 4 feet long by 1 foot wide, apparently to form a seat with a keeping place below it.

At the south of the main room there is a stone on edge, shown on the plan. There was nothing remarkable about the stone itself, but all the paving stones for several feet on both sides of it, on being lifted, were found to overlie a layer of 3 inches deep of limpet shells, the only reason that we could think of for their presence there being that they might tend to keep off damp. After completing the clearing out of this room, we had but a day to spare before being obliged to leave the island, and this day we devoted to exploring the drain through room E. previously referred to. We first removed the rubbish from the passage leading south-west down to the floor level, for a distance about 12 feet.

This disclosed the fact that the passage was paved with flagstones built into the walls on each side. We managed, however, to lift the fourth

one, and found a hole, partly filled with rubbish, almost large enough to admit a man. We sent in a boy, who managed with some trouble to clear it out; we could then see that the flagstones covered an underground passage or drain 5 feet deep, 1 foot wide at the *bottom* and 2 feet at *top*; these at least were the dimensions for about 5 feet in length of the passage measuring from room E., but at this distance the southern wall of the passage turned in towards the northern one, meeting it at a very acute angle, about $8\frac{1}{2}$ feet from the entrance to the room. We had not time to trace the drain (if such it can be called, having no apparent outlet), but we hope next year, or on some future occasion, to complete the exploration of this and of the other unexplored passages from F. and G. On one of the flagstones at the far end of the underground passage just described we found a large intervertebral plate of a whale, 1 foot $2\frac{1}{4}$ inches long diameter and 1 foot $\frac{1}{4}$ inch short diameter. It is pierced by four rectangular holes chiselled out with some sharp instrument, and looks remarkably like the top of a stool with the legs wanting. This excavation, commenced on 22nd July, was stopped for the season on 3rd November 1884, the area excavated being 3296 square feet, and the quantity of rubbish removed about 15,000 cubic feet. To preserve the building as much as possible, and also to prevent stray cattle from falling down into the rooms, we enclosed the excavations before leaving with a stout wire fence.

III. KITCHEN MIDDEN AT HOLLAND.

There are also on the table a few articles of stone and bone which did not come from either of the above mounds, but were found lately when levelling the ground about my own dwelling-house at Holland or *High land*, so called because, although under 50 feet, it is the highest eminence in the island of North Ronaldsay.

It is now ascertained that at least 12 feet in depth of that elevation consists of compressed ashes, mostly black in colour or nearly so, of the consistence of clay, and, like it, of a greasy feeling when rubbed between the finger and thumb. There were some burnt stones amongst the ashes, a few stone whorls (one of which was slightly ornamented), and a fragment of some vessel of steatite blackened on one side. There were many bones

of ox, sheep, and pig, of which the marrow bones were as usual broken across. Some bone implements of unusual form were also found, the uses of which are unknown to us.

The mound is of a rounded form, and in rough numbers measures about 140 yards across; consisting, so far as we have examined it, wholly of ashes; and it is the most extensive *Kitchen Midden* in North Ronaldsay.



Fig. 13. Bone Implement found in a Kitchen Midden at Holland.

I may add, that a large proportion of the farm-houses on the island are built upon artificial mounds. The ground is so uniformly low and flat that, wherever it was possible to do so, such eminences appear to have been taken advantage of for building purposes.

II.

NOTICE OF TWO VESSELS OF GREY STONEWARE (BELLARMINES OR GREYBEARDS), ONE FOUND FULL OF QUICKSILVER IN SHETLAND, THE OTHER AT EYEMOUTH. BY JOHN J. REID, ADVOCATE, CURATOR OF THE MUSEUM.

The larger of the two vessels now exhibited (fig. 1) was found filled with quicksilver in the year 1882 (Sept.), having been exposed to view on the surface of a piece of mossy ground near the shore, after a storm of



Figs. 1, 2. Bellarmines or Greybeards, found in Fetlar and at Eyemouth.

sea spray followed by much rain, in the island of Fetlar, one of the Shetland group. The smaller vessel (fig. 2) I have obtained from the Society's collection. It was found in digging the foundations of a house at Eyemouth in 1863, and is evidently a production of the same class as the

other. The dimensions of the two vessels are as follows:—Fig. 1, height, 11 inches; diameter of mouth, $1\frac{1}{2}$ inch; circumference, 26 inches; greatest diameter, $8\frac{1}{2}$ inches; diameter of base, $4\frac{1}{2}$ inches. Fig. 2, height, 8 inches; diameter of mouth, 1 inch; circumference, $15\frac{1}{4}$ inches; greatest diameter, 5 inches; diameter of base, $2\frac{1}{2}$ inches. As regards capacity, the larger holds a gallon, and the smaller one a quart.

There seems no doubt whatever that these objects belong to a class of mediæval pottery known as Greybeards, Longbeards, or specially *Bellarmines*. Some descriptions of these jugs may be summarised; and it will be apparent that they apply well to the two pieces before you. Ranging in capacity from $\frac{1}{2}$ a pint to 2 gallons, the material of which Bellarmines are made is described as a greyish stoneware covered by a mottled brown glaze. The body or belly is rotund, and the neck narrow; while the jug, in front often ornamented with a Silenus-like mask, has a loop handle at the back, and sometimes is furnished with a spout. Later specimens have ornamented devices in place of the grotesque face, but the mask in many varies much. In some it scarcely can be said to have a human resemblance; in others the features are not only worked out with care, but present a grave and dignified aspect. In many instances there occurs below the face a seal, either circular or oval, and bearing a crest or an armorial coat, sometimes, though rarely, of families, and more frequently of cities and towns in the Low Countries and parts of Germany. These coats may give an indication of date, but occasionally the actual date is given on the jug itself, and those so dated range from 1580 to 1610. Some are further ornamented by medallion busts of warriors wearing “salades” of various fashions, or by foliated designs, such as those upon the larger jug now before us.

So much for the general characteristics of the class of mediæval pottery to which these vessels belong. It may, however, be interesting to trace, very briefly, the existence of similar pottery combined with grotesque faces down from early times.

Among the most ancient remains of Egypt and Greece are to be found jugs of a type not very dissimilar; and, yet more curious to relate, Mexico and Peru furnish us with allied specimens. That the Romans were acquainted with what are called in the north of England

"boggle" or "boggart" (goblin) drinking cups, we learn from their literature—

"Sum figuli lusus, rufi persona Batavi.
Quæ tu derides, hæc timet ora puer."

—*Mart.*, xiv. 176.

Where, oddly enough, the reference seems to take us to the Low Countries; or again—

"Ebrius hæc fecit terris, puto, monstra Prometheus
Saturnalitio ludit et ipse luto."

—*Mart.*, xiv. 182.

In our own literature the allusions refer to the period of Elizabeth, James VI., and Charles I. No doubt, if it be true that the grotesque face was intended to be a caricature of the features of Cardinal Bellarmine, the jugs would be popular in this country at a time when King James was engaged in disputes theological with that prelate, and when also the controversy between the Roman and Reformed Churches had been, if possible, intensified by the able writings of the Cardinal.

Bellarmino, from whom these vessels take a generic name, was born in 1542, and died in 1621. He is described by Fuligati, his biographer, as "very short of stature, and hard featured"; but assuredly, whatever had been his personal appearance, these grotesques would have represented as ill a face as they could. Probably the attempt at caricature would not last long, though the fashion of placing a face on the jug still continued. Ben Jonson says of a landlord ("New Inn"),

"Who's at the best some pound grown thing, a jug
Fac'd with a beard that fills out to the guests."

And again (*Bartholomew Fair*, iv. sc. 3)—

"He hash wrashed so long with the bottle here that *the man with the beard* hash almost streek up his heelsh."

They are both evidently allusions to jugs of this kind. Again, it seems likely that we have a reference to this particular species of pottery in the Inventory of Jewels in Edinburgh Castle, 1578, and also in the List of the Queen of Scots' movables, 1562.

We gather that in England such jugs were known of four distinct sizes; the "gallonier," holding a gallon; the "pottle pot," holding two quarts; "pot," holding a quart; and "little pot," with a capacity of one pint. An imitation of the continental jugs very soon began, and in 1671 Dwight of Fulham took out a patent in connection with this manufacture. The further history of the patent is not known, though in 1737 the death of a Dr Dwight, possibly a descendant, is recorded. Fulham pottery works, however, still exist. Dwight's jugs were just the same as those from Cologne of that period.

In the *Gentleman's Magazine* for 1831 there is an account of a jug which may probably have been of the Bellarmine type. It was dug up from 14 feet below the surface in a chamber in a rath at Doone Glebe, Limerick. At the same time and place were found several silver coins, a gold spur, and other jars, of which this alone was left. It was 7 inches high and 16 inches in circumference at the thickest part. The engraving appended to the description shows a very finely wrought face, with a flowing beard. Besides this face, the body of the jug at its thickest part was ornamented with foliated scroll work between two defining parallel bands, and divided at equal intervals by two small medallions with human heads. From these parallel bands projected in relief above and below four feather-like sprays of work, and below in the spaces between the sprays were medallions of larger size, representing a man with a helmet and raised visor. There is no sign of a spout in the engraving.

In 1810, similarly when a rath at Cork was levelled (Ballyvolane), a fragment of a jar of this kind was found, but it was of a very rough class indeed. The face had no beard, and generally the work was quite inferior to the Limerick jug.

Marryatt, in his *Notes towards a History of Pottery* (p. 75, fig. 36), figures a Bellarmine very like the Limerick jug, but with an inscription in place of the bands of foliation. This jug has also sprays and medallions like the other, but the pottery is fine, of a whitish-yellow, and without glaze. It may be of earlier date, as I am inclined to think is the Limerick one. Possibly, from the style, these may be referred to a period about 1450, and to Jacqueline of Hainault, who died in 1436, and was celebrated for making this kind of pottery.

Jewitt, in his work on Pottery, also refers to Bellarmine (p. 92), and gives us engravings of several. These are of later date, as I think is shown by the use of rings round the neck and beard, an elaboration not observable in earlier forms, and also by the substitution of coats of arms and scroll work for the medallions, and the use of a formal and repeated marking instead of foliations between the parallel lines.

Bellarmine continued to be made, especially in Holland, whence they received the name of "Dutchmen" down to a pretty recent period, and they are now reproduced in several of the pottery works in Germany from the old designs. They were no doubt in quite common use as ordinary receptacles for wine, beer, &c., during a long period. Sir Walter Scott (*Monastery*, chap. ix.) makes reference to one of these jugs:—"Ye may keep for the next pilgrim that comes over, the gruns of the greybeard."

In the case of the larger jug before us there is no doubt that it was actually full of quicksilver when found; indeed, when examining it, I had occasion to invert it, and several minute globules of that metal rolled out on to the table. Why or how it should have been put to this use it is not easy to say.



Earthenware Jar found full of Coins, chiefly of Edward I., near Kinghorn, Fife.

III.

NOTICE OF THE DISCOVERY OF A CIST WITH AN URN AT BRUACH,
GLENLYON, PERTHSHIRE. BY CHARLES STEWART, F.S.A. Scot.,
TIGHENDUIN, BY KILLIN.

On the 19th of July last I received a letter from Mr Gorrie, post-master, Glenlyon, stating that the Messrs MacDonald, Bruach, in cutting through a gravelly knoll, had come upon a stone cist, and requesting me to go and see it opened. This, along with my antiquarian friend Mr Haggart, I did on the following Monday. On opening up the knoll further we found that the cist was made of eight flags,—three in the front, two at the back, one at each end, and one above. They were carefully and neatly placed. The knoll itself was about 60 feet long, by an average of about 14 broad. The cist would be about the centre lengthways, and four feet from the upper side, and lay from east to west. The dimensions are as follow :—

Length of flagstone covering,	. . .	5 feet 9 inches.
Thickness do.	. . .	0 " 4 "
Maximum breadth,	. . .	4 " 0 "
Minimum do.	. . .	3 " 0 "
Inside length,	. . .	3 " 9 "
Do. breadth,	. . .	2 " 0 "
Do. depth,	. . .	2 " 4 "

The cist was covered by the usual burial cairn, 2 feet in height, and made of gathered stones. Above the cairn there were two feet of earth. In front there was a retaining wall, built of the larger stones in the knoll, and which were of a yellow colour, contrasting with the grey stones in the cairn. In the cist we found a skeleton lying on its left side, with the knees doubled up. The side next the earth was somewhat decayed, but the right side was nearly perfect. Strange to say, the skull was wanting. On submitting the skeleton to Dr Hamilton Hodges of Killin, he pronounced it to be that of a large and powerful man about 6 feet 2 in height. Dr Crerar, Tirarthur, who has since examined



it, practically confirms Dr Hodges. We found an urn near the north-eastern side of the cist, lying on its side. The urn is of burnt clay, of the class known as "food vessel," ornamented with the "herring bone" pattern, and bands of oblique and parallel lines going round the vessel. Part of its contents were analysed by Mr MacGregor, chemist, Killin, and were found to consist of about 90 per cent. of dark earth, mixed with which was some of the gravel at the bottom of the cist, and with a trace



Urn found in a cist at Bruach, Glenlyon (7½ inches high.)

of iron, and about 10 per cent. of unburnt bones. One side of the urn is perfectly whole, the other got a little broken at the edge. I exhibit a beautiful drawing of it, kindly done for me by Miss Cameron of Sunderland, and three photographs by Mr MacGregor of Killin, which give an excellent idea of its appearance.

Such then are the facts connected with this find. I will not indulge in many conclusions, but I think the following may safely be drawn, that the burial belongs to very ancient times, and may be placed considerably beyond the Christian era. This is evidenced by three things—first, the manner of the burial is evidently pre-Christian ; second, the form of the urn associated with it is characteristic of the Bronze period, and has often been found deposited with weapons and implements of bronze ; and

third, the character of its ornamentation is not what we know as Celtic, and must therefore be referred to the period of that historically unknown race which preceded all the known manifestations of Celtic art within the Scottish area. Again, if we judge from this one skeleton, that race must have had some very tall and powerfully developed men amongst them. By and by perhaps, from records of old customs, we may get some explanation of the fact of the head being wanting. The contents of the urn were probably the remains of food. Urns of this shape are, as already said, known as "food vessels," but in this case it is not evident from the nature of the contents that such was really the intention of the vessel.

Mr Bullough of Meggernie, on whose property the cist was found, and who has now the urn in his keeping, is, I am glad to find, to enclose the cist with an iron railing. I owe my best thanks to Messrs Alexander and John MacDonald, and to Mr Gorrie, for their kindness in allowing me to see the cist opened, and for the valuable assistance they rendered.

IV.

NOTICE OF STONE CIRCLES AND CUP-MARKED STONES IN STRATH-BRAAN, PERTHSHIRE. BY JAMES MACKINTOSH GOW, F.S.A. Scot.

During a holiday in the month of September 1884, in Strathbraan, I took the opportunity to examine a stone circle on the hillside above the farm of Meikle Fandowie. It is on Lord Mansfield's property, and situated 5 miles west from Dunkeld, on the south side of the River Braan.

The hill is named on the Ordnance Map "Airlich" (a name perhaps having reference to the circle), and is easily distinguished by its remarkably conical shape; the summit is 1026 feet above the sea-level. The stone circle (fig. 1) is also marked on the map, about half-way up the hill, and is on the slope, facing north, to the south-west of the farmhouse. Six of the stones are standing in their original positions, and other four are thrown down, one being in several pieces; but the circle does not appear to have consisted of more than the ten stones, and,

roughly speaking, is about 25 feet in diameter. The stones, which are still standing are about 3 feet above ground. The circle is little known in the district, and no tradition exists regarding it.

My next excursion was to the farm of Little Fandowie, about a mile further west, on the same side of the river, and also on Lord Mansfield's property. The tenants of the farm are very old people, and although they have lived nearly all their days within a mile of the circle above referred to, they had never seen it. I was informed, however, that in a corn-field about 400 yards west from the farm-house, there was a group of stones called in Gaelic *Clachan Aoradh*, and on proceeding there I found the remains of a circle which probably had been



Fig. 1. Stone Circle on Findowie Hill, Strathbraan, Perthshire.

nearly of the same dimensions as the one already described, but all the stones, with one exception, have been thrown down and huddled together, and some of them broken. The only one left standing, which appeared to be in its original position, is 4 feet above ground. It resembles the trunk of a large tree, about 2 feet in diameter, and is perfectly flat and smooth on the top. The name applied to this group of stones, *Clachan Aoradh*, which is understood as "worshipping stones," has no doubt prevented their total destruction or removal from cultivated ground. There is a mountain ash tree of considerable age standing beside the only remaining upright stone.

Near the steading of this farm of Little Fandowie, there was pointed out a stone enclosure of comparatively recent date, in which there was said to be an old burial-place. On examining it, I found that it contained what appeared to be the foundation of a chapel, about 33 feet long from east to west, by about 20 feet broad at the east end. The

ground was deeply covered with grass and weeds, and no headstones or other marks of burial were visible.

Outside of the enclosure, however, and scattered about, were several large whinstone boulders, on one of which (fig. 2), near the entrance, were nine cup marks. This stone is 6 feet long by 3 feet broad, and 2 feet 6 inches deep; the largest of the cups is 4 inches in diameter.

Mr Anderson, one of the tenants of the farm, who is about ninety years of age, informed me that his father had told him of the last interment made in this burial-place. It was that of a child belonging to

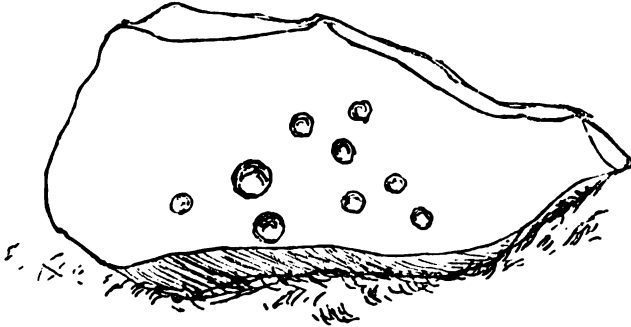


Fig. 2. Cup-marked Stone at Little Fandowie, Strathbraan, Perthshire.

a soldier (perhaps one of General Wade's sappers), who worked at the road from Crieff to Dunkeld, some time after the period of the Rebellion. Mr Anderson himself had seen a person of the name of Macduff, who came to the spot to bury one of his teeth, as he said the ground was the burial-place of the family. The chapel had probably given the name "Fandowie" to the place, meaning the church or burial-place of the Duffs, which may be synonymous with "Kilduff," a name which occurs in other parts of Scotland.

The foundations of the house or castle of a Baron Macduff, who flourished in the time of James V., were also pointed out, quite near and east from the chapel, and all round were marks of buildings, as if a considerable number of people had lived under the baron's wing. His traditionary fame as a warrior still remains. He was the best bowman

far or near, and many stories are told of his exploits. A tree, on which he hanged his people, stood near the house. The king, in one of his frolics and disguised as a beggar, had visited the baron, and was hospitably entertained, the baron being afterwards summoned to Scone to dine with the king, who then made himself known as the visitor at Fandowie, and gave Macduff a grant of land, "from the one burn to the other," in token of his regard for the kindness he had received. King James had a hunting seat at Trochrie, three miles further east in the Strath; the remains of one of its towers are still standing.

On inquiring at the farm of Tomnagairn, also in Strathbraan, on the north side of the river, and nearly opposite to Little Fandowie, Mr Macduff, the tenant, mentioned a stone with cup markings (fig. 3), on which he

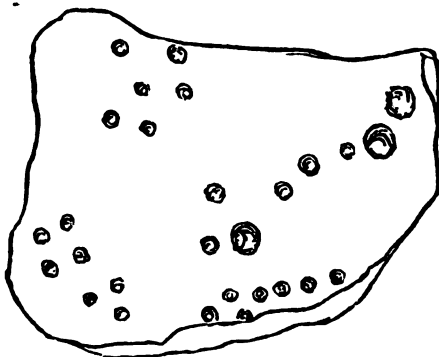


Fig. 3. Cup-marked Stone at Tomnagairn, Strathbraan, Perthshire.

had played when a boy,—“making,” as he said, “the gathered rain run from one cup to the other.” It lies on the top of a stratified rock, which juts out of the ground in one of the fields, half-way between the farmhouse and the road to Amulree, and slightly east from the six-mile stone. There are twenty-eight cups of various sizes on the stone, which is harp-shaped, 4 feet 8 inches in length, 3 feet 8 inches broad at the top, 3 feet 4 inches across the centre, 1 foot 6 inches deep at one side, and 8 inches at the other. On showing this stone a few days afterwards to the Rev. Mr Maclean, Grandtully, who happened to be in the district, he suggested that

it was part of the rock on which it lay, and this was confirmed by our finding three additional cups on the rock itself (fig. 4). Endeavours had evidently been made to remove the obstruction from the field in the course of reclaiming the ground, but these had gone no further than detaching the top of the rock, and leaving it where it now remains.



Fig. 4. Cup-marked Rock, Tomnagairn, Strathbraan, Perthshire.

V.

NOTICE OF AN ENAMELLED CUP OR PATERA OF BRONZE FOUND IN LINLITHGOWSHIRE, RECENTLY PURCHASED FOR THE MUSEUM.

By JOSEPH ANDERSON, LL.D., ASSISTANT SECRETARY AND KEEPER OF THE MUSEUM. (PLATE I.)

The enamelled bronze patera, which is the subject of the present notice, was found a considerable number of years ago in Linlithgowshire, the precise locality being unknown. It was exhibited to the Society in 1865 by Mr James Nicolson, Kirkcudbright, and has now been acquired by the Purchase Committee for the National Museum.

It is a shallow bowl-shaped vessel of bronze, $4\frac{1}{2}$ inches diameter, and $2\frac{1}{2}$ inches deep, with a flat handle $3\frac{1}{2}$ inches in length, attached to the brim of the bowl. The body of the bowl is of one piece, the bottom, which is soldered on, seems to have been renewed, and the handle is also attached by solder to the side of the cup. The form is that of the ordinary Roman *patera* of bronze, but it differs from the prevailing Roman form in the shallow and globular shape of the bowl, and in the

peculiar shape of the handle. Its most remarkable features are the enamelled decorations of the exterior of the bowl and of the upper surface of the flat handle. Representations of these in the colours of the original are shown in Plate I.

The bowl has a plain hollow moulding round the outside of the rim. Beneath this it is encircled by a band of enamel of a light green colour traversed by a wreath, the stem and leaves of which are formed by the metal, showing in relief on the ground of the enamel. Underneath this band, and separated from it by a narrower band of red, there is a wider band of dark blue, traversed with a wavy scroll with leaf-like ornaments of pale green in the alternate spaces of the scroll. The leaves are serrated with points of pale yellow. Under this band, and separated from it by another narrow band of red, is a band of vandyked ornament of bluish-green, each vandyke of green alternating with one of yellow. The upper part of the flat handle is decorated with heart-shaped and scroll-like ornaments in red and green on a blue ground within a yellow border. The process employed in the enamelling is that which is known as *champlevé*, in which the spaces to be filled with the enamels are chiselled or hollowed out of the metal. The patterns of the decoration are a wreath, a wavy scroll, and a vandyke; and the colours blue, red, and green, with a slight admixture of a faint yellow. The combination of these peculiar colours and patterns imparts to the object a certain individuality of character sufficiently marked to be distinctive. Apart from the singular beauty of its decoration, it is possessed of this special interest that it is the only vessel of its kind and character known to exist in Scotland. It is, however, one of a class of objects, which though few in number, are pretty widely distributed over the area, which may be termed the outskirts of the Roman Empire, towards the north and west—that is Britain, North Germany, and Scandinavia. We look in vain for anything like it within the area of the Empire proper, and it may therefore be regarded as a product of the culture of some portion of the area of north-western Europe, where it was touched and modified by the Roman culture.

Within this area there are other three objects presenting the same essential features of character, and no more than three are at present



ENAMELLED BRONZE VESSEL, FOUND IN LINLITHGOWSHIRE

known to exist anywhere. Of these two are in England and one in Denmark. The two that are in England are—a cup found at Braughing, and a vase found in a sepulchral tumulus at Bartlow, in Essex.

The cup from Braughing is similar in form to the *patera* from Linlithgowshire, except that it wants the handle.¹ It is $3\frac{1}{2}$ inches diameter, and $2\frac{1}{2}$ inches high. Beneath the plain moulded rim is a band of bluish-green enamel traversed by a wreath, the stem and leaves of which are formed by the metal showing in relief on the ground of the enamel. Beneath this is a broad band of blue, traversed by a wavy scroll, with leaf-like ornaments placed alternately in pale green. Between this band and the foot of the cup is a broad band of triangular spaces or vandykes of alternate blue and green.

The same style of ornament and the same combination of colours (red, blue, and light green) are seen in the decoration of the splendid spheroidal vase of bronze found in a tumulus at Bartlow, in Essex.² The tumulus was the largest of a group of four situated in a line, with a space of from 13 to 15 feet between their bases. In form they were truncated cones, the diameter of the smallest being 80 feet and its height 18 feet, and that of the largest being 144 feet and the height 45 feet. In the centre of the tumulus there was found a chest or coffer of oak, 4 feet 2 inches in length, 3 feet 8 inches in width, and 2 feet deep, made of planks about 4 inches thick fastened together with stout iron nails. It contained several squarish bottle-shaped vases of green glass, one of which was filled with calcined human bones. It was a largish vase, shaped like a case bottle, having squarish sides and a bottle-neck, with a flat loop-handle from the neck to the shoulder. It stood altogether $15\frac{1}{2}$ inches high, $11\frac{1}{2}$ inches to the shoulder, and the lip $5\frac{1}{2}$ inches diameter, admitting the hand freely. It was thus capable of containing the cremated bones of a human body. There was also a small vase of clay and several of the slender long-necked unguent or perfume vessels of glass, which are misnamed "tear-bottles." The objects in bronze were a small *patera* with a reeded handle, terminating

¹ Engraved and described by A. W. Franks, in the *Proc. Soc. Antiq. Lond.*, second series, vol. iv. p. 514.

² Described and figured in *Archæologia*, vol. xxvi. p. 300, pl. xxxv.

in a ram's head; a bronze lamp, with an acanthus leaf-shaped handle; two narrow-necked vases of bronze, with looped side handles; two strigils; a large bronze vase, with an elegant pattern in relief round the neck, and a looped handle surmounted by a sphinx-like figure; and the splendidly enamelled spheroidal vase, with a rectangular handle across the mouth fitting into loops at the sides. It is of small size, $4\frac{7}{8}$ inches in extreme diameter and $3\frac{3}{4}$ inches high. The moulding round the lip is decorated with narrow parallel bands arranged in groups of six, each group filled with enamels of the same colour—red, green, or blue. Under the hollow of the neck, which shows the plain bronze, is a band of double triangular spaces, the lower arranged in threes of red, green, and blue, each separate vandyke of the lower series alternating with those of the upper, which all show the plain bronze. A similar band of double vandykes is repeated at the bottom of the vase. The space between them is filled by two wide bands of blue separated from each other by a band of pale green traversed by a wreath formed by the bronze coming up to the surface of the green ground. The two wider bands of blue are traversed by a wavy scroll of red, with pale green five-pointed leaves in the alternate spaces of the scroll.

An enamelled cup, found in a moss at Maltbeck in Denmark,¹ has a close similarity to that found at Braughing. Under a plain moulded rim, there is a band of bluish-green enamel traversed by a wreath, the stem and leaves of which are formed by the metal showing in relief on the ground of the enamel. Below this is a wider band of blue enamel, traversed by a wavy scroll, with leaf-like ornaments placed alternately, each having a centre of red, surrounded by a rosette of pale green; the space between this band and the bottom of the cup is filled with vandykes of blue, green, and red. The cup measures 5 inches in diameter and 3 inches deep. It had been deposited in a clay vessel, of which only a portion was preserved.

Describing this cup, M. Engelhardt remarks of the style of its decoration, that it is unique among the objects of the early Iron Age in Denmark. But in point of fact, the descriptions of all the four objects

¹ Described and figured in the *Memoires de la Société Royale des Antiquaires du Nord*, 1866-71, p. 151.

show that they are identical in the manner and motive of their decoration. They are all in the same process of enamelling—a process applied to no work of pure Roman art-workmanship that I know. They all possess the same scheme of colour—blue, red, and light green; and they all present absolutely the same combination of patterns—a wreath, a wavy scroll, and a band of vandykes.

I have said that this process of enamelling is not of Roman origin. No work of the palmy days of the Empire exhibits it. No contemporary writer notices it as one of the arts practised by Roman artificers. But, on the other hand, we have the testimony of Philostratus, that in his time—that is about A.D. 200—this art of enamelling was practised by the barbarians in the Ocean. In his work called the *Icones*,¹ in describing a painting of a boar-hunt, he refers to the harness of the horses as enriched with gold and various colours; and in order to account for his reference to diversity of colours in the harness of horses, he adds these remarkable words—"For it is told that the barbarians in the Ocean pour these colours upon heated brass, and that they adhere to it, and become as hard as stone, and so preserve the forms which they thus represent." This is as distinct a description of *champlevé* enamelling as could be expected from one to whom the process and its products were known only by hearsay. The barbarians in the Ocean by whom it was practised are not more distinctly indicated as to their nationality. But we now know for certainty that horse-trappings enriched with *champlevé* enamel, and pertaining to a period before the time of Philostratus, are peculiar to Britain. There is not a single example in Scandinavia. The Gauls as well as the Britons—of the same Celtic stock—practised enamel-working before the Roman conquest. The enamel workshops of Bibracte, with their furnaces, crucibles, moulds, and polishing stones, and with the crude enamels in their various stages of preparation, have been recently excavated from the ruins of the city destroyed by Cæsar and his legions. But the Bibracte enamels are the work of mere dabblers in the art compared with the British examples. The home of the art was in Britain, and the style of its patterns as well as the associations in which the objects

¹ *Iconium*, lib. i. xxviii.

decorated with it are found, demonstrate with certainty that it had reached its highest stage of indigenous development before it came into contact with the Roman culture. But in the objects which I have described in this paper there is palpable evidence of the influence of a foreign culture, although in style and execution we may still claim for this peculiar variety of enamelled work the distinctive name of the *opus Britannicum*, first bestowed upon it by Mr Franks, who has always maintained the Celtic origin of the art of enamelling, so far as the west of Europe is concerned.

An enamelled patera of similar character, though differing somewhat in form as well as in the style of its ornamentation, was found at Pymont, in the Rhine valley.¹ It was found at a depth of 10 feet under the surface, near a mineral spring, in the close vicinity of which there were also found about 300 fibulæ of various forms, 12 belt-buckles, and coins of Domitian, Trajan, and Caracalla. It appeared from the observations made during the excavations that these objects had been deposited at different times as offerings to the divinity of the well—not thrown into the water, as was the Roman custom, but deposited beside it, at the foot of an aged tree. The vessel, which is of bronze, is $4\frac{1}{2}$ inches diameter and $2\frac{1}{2}$ inches deep. The handle, which is similar to that of the Linlithgowshire *patera*, is $3\frac{3}{4}$ inches in length and $1\frac{1}{4}$ inch in greatest breadth. The cup has a plain moulded rim; and the enamelled part, which reaches from the rim to the bottom, is divided into a series of pentagonal spaces, bordered by a simple line or scroll, and enclosing a scroll-like ornament with leafy terminations. The triangular spaces between the tops of the pentagons are filled with triplets of leafage. The ground is blue, the leafage green and red. The flat upper part of the handle is ornamented with a wavy scroll of similar leafage, also on a blue ground.

¹ Figured and described by R. Ludwig, in the *Jahrbucher der Vereins von Alterthumsfreunden in Rheinlande*, Heft xxxviii. p. 58, pl. i. Bonn, 1865.

MONDAY, 12th January 1885.

PROFESSOR DUNS, D.D., in the Chair.

A Ballot having been taken, the following Gentlemen were duly elected Fellows :—

C. S. MURCHISON-BOMPAS, 121 Westbourne Terrace, London.

ROBERT CHAMBERS, Publisher, 10 Claremont Crescent.

WILLIAM NICOL ELDER, L.R.C.P. and S.E., 10 West Maitland Street.

JOHN GRANT, Marchmont Herald.

C. R. MACDONALD, M.D., Beith.

Rev. W. M. METCALFE, South Parish Manse, Paisley.

WILLIAM TRAILL, M.D., of Woodwick.

The following Donations to the Museum and Library were laid on the table, and thanks voted to the Donors :—

(1) By GEORGE H. STEVENS, Gullane.

Urn of the so-called "food-vessel" type, measuring $4\frac{3}{4}$ inches in height, $5\frac{1}{2}$ inches diameter across the mouth, narrowing to 3 inches at the base. It is rudely ornamented on the upper part by a band of irregularly parallel lines of impressions of a twisted cord encircling the vessel in a direction parallel to the rim. Below, on the upper part of the slope towards the bottom, there is a band of short vertical lines of the same character. The inside of the rim is bevelled, and ornamented with a band of similar impressions encircling it horizontally.

The urn was found in 1880 in excavating for a quarry on the rise of Luffness Links towards Gullane Hill. It has been well figured in the *Proceedings* of the Berwickshire Naturalists' Club, vol. x. p. 306.

(2) By THOMAS JEFFREY, Farmer, Throsk, Stirlingshire.

Statuette of Mercury in bronze, $4\frac{1}{2}$ inches high, found in ploughing on the farm of Throsk, parish of St Ninians, Stirlingshire. The figure

is nude, with the *talaria* or winged sandals, and the winged *petaeus* or head-dress as usually represented. The right hand, which probably bore the *caduceus*, is gone; the left arm sustains a few simple folds of drapery.



Statuette of Mercury found at Throsk, Stirlingshire ($4\frac{1}{2}$ inches high).

(3) By R. VANS AGNEW of Barnbarroch, F.S.A. Scot.

Flat oval Pebble of grey sandstone, 10 inches in length by $7\frac{3}{4}$ inches in greatest width, having a shallow circular cavity $3\frac{3}{4}$ inches in diameter, and not exceeding $\frac{1}{2}$ an inch in depth, in each of its opposite flat sides. The cavities are smooth, and seem to have been produced by friction.

(4) By CHARLES WALLACE of Dally, Kirkcolm, through Rev. GEORGE WILSON, Corr. Mem. S.A. Scot., Glenluce.

Fragment of Sandstone Slab, measuring 11 inches in length by 9 inches in breadth, and not exceeding 2 inches in thickness, having a rudely incised Maltese cross on one face, from the site of Chapel Donnan, Kirkcolm, Wigtownshire.

(5) By JOHN M'MEEKIN, Knockneen, Kirkcolm, through Rev. GEORGE WILSON, Glenluce, Corr. Mem. S.A. Scot.

Quadrangular Block of Sandstone, 10 inches in length, 5 inches in breadth, and 3 inches in thickness, having a faintly incised Maltese cross on each of its broad faces, from the neighbourhood of Chapel Donnan, Kirkcolm. Both this and the stone previously noticed from Chapel Donnan may probably have been boundary marks.

Three Spindle Whorls, viz. (1) of sandstone, $1\frac{3}{8}$ inch, ornamented

on one face with two incised circles concentric with the spindle-hole; (2) of grey shale, $1\frac{1}{4}$ inch in diameter, similarly ornamented with three slightly incised circles; (3) of steatite, $1\frac{1}{8}$ inch in diameter, plain, with rounded edges.

Socket-Stone, an oval pebble of quartzite, $3\frac{1}{2}$ inches in length by $2\frac{1}{2}$ inches in breadth, with hollows worn to the depth of $\frac{3}{4}$ inch by the revolutions of a vertical iron spindle.

(6) By Rev. GEORGE WILSON, Glenluce, Corr. Mem. S.A. Scot.

Two Upper Quern Stones of granite, from Barlockhart Loch, Glenluce (one broken).

Grinding or Polishing Stone, from Barlockhart Loch.

Rubbing Stone of grey granite, from Machermore, Glenluce.

Grinding Stone, being half of an oval pebble with hollows, from Mid Torrs, Glenluce.

(7) By JAMES M. STRACHAN, M.A., St Andrews.

Bronze Spear-head and Gouge, found at Torran, near Ford, Loch Awe, [See the previous communication by Mr Strachan, vol. xviii. p. 207.]

(8) By EUSTACE BALFOUR, Esq., through Dr ARTHUR MITCHELL, Vice-President.

Circular Cake of Adipose, found in a meadow on the bank of the Conon, Strathconon, Ross-shire.

(9) By the SENATUS OF THE UNIVERSITY OF EDINBURGH.

Medal in Bronze of the Tercentenary of the University of Edinburgh.

(10) By JAMES CRUIKSHANK ROGER, F.S.A. Scot., the Author.

Celticism a Myth. 8vo, 89 pp. London, 1884.

(11) By Rev. J. COLLINGWOOD BRUCE, LL.D., Hon. Mem. S.A. Scot., the Author.

The Three Bridges—Roman, Mediæval, and Modern—over the Tyne at Newcastle. 4to. Reprinted from *Archæologia Æliana*.

(12) By Professor GEORGE STEPHENS, LL.D., Hon. Mem. S.A. Scot.,
Copenhagen, the Author.

The Old Northern Runic Monuments of Scandinavia and England.
Part III., folio. Copenhagen, 1884.

The following Communications were read :—

I.

SUGGESTIONS RESPECTING THE SITE OF BEDE'S ANCIENT CITY, GIUDI. By PETER MILLER, F.S.A. Scot.

Various opinions have been held by learned antiquaries respecting the identity of the site of Bede's ancient city Giudi, mentioned by him in his *Ecclesiastical History of England*.¹ Those of them who support the opinion that this city was situated on the island of Inchkeith appear to do so chiefly because of that island answering in some measure to Bede's notice of the city as being situated in the midst of the eastern inlet of the sea, which runs in far and broad into the land of Britain. But this argument is equally applicable to other three islands in the Firth of Forth, namely, Inchcolm, Cramond Island, and Inchgarvie, so that little or no importance can be given to it unless supported by some other and more specific evidence. Before entering upon the evidence I am about to submit in support of another site that has never, so far as I am aware, been suggested, it will be as well to give Bede's account of the city, and also the only two other incidental notices of the same place, by two other ancient writers. Bede, in the passage quoted, is speaking of the inroads made by the savage foreign nations upon the Romanised Britons south of the Roman wall constructed between the Forth and Clyde, about the year A.D. 140, by Lollius Urbicus, in the reign of Antoninus Pius. "We call these

¹ Macpherson and Skene both express the opinion that this city may have been on Inchkeith, while Camden supposes it to have been on the Roman Wall at Kirkintilloch. Roy, in his *Military Antiquities*, places it at Camelon. Gordon, in his *Itinerarium Septentrionale*, and Stuart, in his *Caledonia Romana*, also place it there.

foreign nations," he says, "not on account of their being seated out of Britain, but because they were remote from that part of it which was possessed by the Britons, two inlets of the sea lying betwixt them, one of which runs in far and broad into the land of Britain, from the eastern ocean, and the other from the western, though they do not touch one another; the eastern has in the midst of it the City Giudi, the western has on it, that is on the right hand thereof, the City Alcluith, which, in their language signifies the Rock Cluith, for it is close by the river of that name." The incidental notice is from Nennius. "He (Oswy) slew Penda, in the field of Gai Campi, and the kings of the Britons, who went out with Penda on the expedition as far as the City Iudeu, were slain."—"Then Oswy restored all the the wealth which was with him in the city to Penda, who distributed it among the kings of the Britons, that is, Atbret Iudeu." The second reference is from an old tract of the ninth century, ascribed to Aengus the Culdee, and rendered thus by Dr Skene:—"The Sea of Giudan in the Firth of Forth, so called from the City of Giudi, which Bede says was in the middle of it, and which may be identified with Inch Keith."

It is very obvious that all these three notices refer to one and the same city, whatever may have been its actual site. The identification of that site is unquestionably surrounded with difficulties, but it is only by taking into account all the circumstances of the very limited information which these old writers have supplied us with, that the question can be determined, if ever it can be determined. It is not very apparent, whether Bede has given us the name of the city in its purely British or Welsh form, or in a Latinised form. It seems certain, from Bede's reference to the two cities, Alcluith on the western inlet of the sea and the City Giudi on the eastern inlet, that he was describing two well-known landmarks of his time, in the regions of the Firths of Clyde and Forth, and that the character of the one on the western inlet was equally applicable to that on the east. Bede does not always use the same Latin word for city. In the passage quoted, however, he uses the Latin word *urbs* with reference to both Alcluith and Giudi, which is translated city in English. It is beyond question, from what is known respecting Alcluith, Dumbarton Castle, that it was not a city

or town in our sense of the English word, but was only a strength or stronghold in a military sense, for the area of Dumbarton Castle is of very limited extent, and is quite inaccessible except on one side, and incapable of accommodating any large number of people. This remark is equally applicable not only to Inchkeith, but to the three other islands in the Firth of Forth—Inchcolm, Cramond, and Inchgarvie. It so happens, however, that Bede leaves us in no doubt whatever as to the actual sense he meant to convey by the word *urbs* as applied to Alcluith; for, in another chapter of his History, he describes Alcluith as a “*civitas munitissima*,” a fortified city, “*ubi est civitas Britonum munitissima usque hodie, quæ vocatur Alcluith.*”¹ This description of it by himself establishes the fact that Alcluith was a fortified stronghold, and the idea he obviously meant to convey in mentioning the City Giudi on the eastern inlet was, that it also was a stronghold or fortified place, like Alcluith on the west, and like the latter had a certain relation to the Roman wall.

The expression used by Bede with reference to Giudi as being situated *in medio* of the eastern inlet is susceptible of various renderings, and here, I apprehend, has arisen one of the difficulties in determining with certainty its actual site. Some of the authorities on the subject seem to hold that it could only be on an island in the very middle of the Firth of Forth. Had that been the case, would not Bede have used a different expression? *In medio* may either mean in the middle of the inlet of the sea, as between the two opposite shores, or it may mean in the middle lengthways, as between its two extreme ends. The one expression is just as correct as the other, or it may mean that it was situated on the extreme end of a long peninsula that projected itself far in towards the middle of the sea, and appeared to be so situated, whether as seen from the high land on the shore, on either side of the Firth, or as seen from the sea itself. The idea that the city was on an island situated in the middle of the Firth receives no support whatever from the reference made to the City Iudeu by Nennius. That writer, in

¹ Est autem sinus maris permaximus, qui antiquitus gentem Brittonum a Pietis secernebat, qui ab occidente in terras longo spatio erumpit, ubi est civitas Brittonum munitissima usque hodie, quæ vocatur Alcluith.—*Bede*, B. i. c. 1.

referring to the City Iudeu, is narrating the events that took place between the cruel Penda, king of the Mercians, and Oswy, king of the Northumbrians, about the year 655, when Oswy slew Penda in the field of Gai, along with the kings of the Britons who went out with him on this expedition as far as the city of Iudeu. Previous to this, Oswy is said to have given up to Penda all the wealth that was with him in the city, who distributed it among the kings of the Britons. Bede's narrative of the same event corresponds very much with Nennius. He says that Penda himself was slain, and his army that invaded the kingdom of Northumbria was completely vanquished in the battle of Vinwed, and the thirty princes who were with him were slain, the war being concluded in the country of Loidis. Now the idea that Iudeu (Giudi) was situated on an island such as Inchkeith, is altogether inadmissible, if Bede's or Nennius' description of those events is to be taken as correct, the idea of going as far as Inchkeith would not be applicable. If we further consider the modes of warfare, either for defence or offence, that were used in these early times a fortified strength on Inchkeith for either of these purposes appears to be altogether useless. If this city was situated on an island, Inchgarvie is a much more likely place. Before and during the Roman occupation, and long after the Romans had left this country, this small island must have formed a very important military position, from its commanding the narrow strait of the Firth of Forth between the two projecting headlands at Queensferry. If the City Giudi was situated on an island, this one was far more likely to be the site than any of the others, because of its commanding the strait, on either side of which dwelt hostile peoples.

Five miles above Queensferry, on the Firth of Forth, stands the grim-looking Castle of Blackness. Nothing is known of its very early history. Roy and other writers on Scottish military antiquities specially refer to it as a place that must, during the Roman period, have played a most important part in the early history of Scotland, as well as during the Saxon period of our history. Although now a deserted and desolate-looking place, for centuries it was one of the most important sea-ports of Scotland. There are ample details of the revenues derived from it as a port of entry, in the Chamberlain's Rolls for Scotland,

as well as in the Accounts of the Lord High Treasurer of Scotland, where it figures as a royal castle and naval station.

Until a comparatively recent period there were no harbours for vessels between South Queensferry and the mouth of the Avon, a distance of 11 miles, except this at Blackness. During the Roman period, before and after the building of the Roman wall, the natural harbour at Blackness must have been of essential importance throughout the Roman occupation, as it lay within 2 or 3 miles from the eastern termination of that wall. The military way that stretched from Alcluith along the south side of the Roman wall all the way to Cramond must have come within a mile of Blackness Castle, where the military and other stores only could be landed for the garrisons manning the wall. Bede says that the wall commenced at a place called Peanfahel, about 2 miles west from the Monastery of Abercornig (Abercorn), but there is a mistake as to the distance. It is now established almost beyond question by the recent finding of the memorial tablet, now in the National Museum, in 1868, at Bridgeness, half a mile or so west of Carriden Parish Kirk, that that was the eastern commencement of the wall. The distance between Abercorn Church and the point where the stone was found, measured on the Ordnance Survey Map, is nearly 5 miles in a straight line.

Blackness, like Alcluith, formed a strong outpost, or in military phraseology, a "point d'appui," to the eastern termination, besides covering the only harbour that had immediate connection with the wall on the Firth of Forth, much in the same way that Dumbarton Castle did on the western end on the Clyde. That this was so, is quite apparent from Bede's narrative, for the description of the physical configuration of the district given by him is only preliminary to what he is about to relate respecting the means that were adopted—the building of the wall as a defence, in order to prevent the incursions of the hostile savage peoples, the Scots and Picts. This being so, is it not something very decisive against the idea that this city was situated on an island, some 15 miles away from the wall, and 4 miles from the land on either side of the inlet. Blackness Castle¹ is situated on the extreme north end of

¹ Besides the Castle there are extensive mound ruins situated on an elevated position inland, about which there is no tradition, but the mound is called the Castlehill.

a low ridge of rocks jutting out into the sea to the extent of one-fifth of a mile, and at high water is all but surrounded by it. The area on which the castle stands is only connected with the mainland by a narrow ledge of rock, the width of the causeway. As seen during high water, either from the heights on the land side or from the sea, it is unquestionably in the midst of the inlet. Bede says it was situated *in medio* of the inlet. In his concise and brief mode of expression, it is difficult to conceive how he could have more graphically or correctly described its situation without going more into detail. Any intelligent person describing Blackness Castle, as seen from the land or sea, could not do so more correctly than Bede has done in using the words *in medio*. Bede, so far as known, never saw it; he only described it probably from information furnished by the Monks of Abercurnig.

When the place was first called Blackness it is impossible now to say, but the name is unmistakably Saxon, so that there need be no hesitation in assuming that in early times it was known by some other designation. The earliest notice of it is contained in a charter of William the First's time, where it is spelt Blackenis.

In the Chamberlain's Rolls the spelling varies—Blackynes, &c. There is a small rivulet that falls into the sea close by the east side of the Castle, called the Back or Blackburn. The Ordnance Survey Maps give both names. Blackness is situated on the extreme north-east corner of the parish of Carriden; while Bridgeness, the place where the memorial stone tablet was found in 1868, is at the extreme west end of the parish. In Bede's time there were certainly no parochial divisions of the district; he simply says that the wall began at a place called, in the Pictish language, Peanfahel, about 2 miles west from the Monastery of Abercurnig. Neither he nor Nennius makes any reference to a fort or city at the end of the wall. Had there existed at the commencement of the wall a very ancient city—such as Caer Eden, as some allege—the probability is that Bede would not have used in his description the name of such an insignificant place as Peanfahel—which simply means the head or end of the wall. The earliest and most reliable mention of Carriden is contained in one of the Holyrood charters in the time of David I. by Robert, Bishop of St Andrews, say 1140, in which the name is spelt

Karedyn and *Karreden*. Some writers quote, from an addition to Gildas' history, to prove that Carriden was known so early as Gildas' time as a most ancient city, under the name of Kair Eden. This, however, is a great mistake, as the statement in question could not have been written for about five centuries after Gildas' death in 570. The phraseology used by the scribe who wrote the sentence betrays the exact time, before which it could not have been written. This extract says "that the wall extended from the Scottish sea (*mare Scotiæ*) unto the Irish sea; that is from Kair Eden, a most ancient city about 2 miles from the Monastery of Abercurnig, now called Abercorn." It is a well established fact that the Firth of Forth was not known in history as the *Mare Scoticum* or Scottes Water until about the commencement of the eleventh century. The extract is taken from what is called the Capitula of Gildas, and, according to Stevenson, is only found in a MS. of Gildas' History of the thirteenth century; and he assigns 564 as the date of the history, so that we are justified in assuming that the date of the Holyrood charter is the earliest record that we have of Carriden as the name of the district. What the origin or derivation of that name may be is not a mere matter of conjecture. I am disposed to assert that the *Caredyn* and *Carreden* of the Holyrood charter of the twelfth century is simply the rendering into English of Nennius' *Iudeu* of the ninth century, as the latter is the equivalent of Bede's Giudi of the eighth century; for the following reasons:—Nennius' form of the word, with the consonant J as the initial letter, must be Latin, as neither the Welsh, Irish, nor Gaelic languages have the consonant J in their alphabets. I take it to be the Irish form of Bede's Giudi. Then the initial letters of many Welsh words are subject to great mutations. The initial G is sometimes dropped altogether, as in the case of the name of the river Gippen near Ipswich, from which the name of that town is derived—the name of the river being spelt Ippen as well as Gippen. Considering the diversity of spelling of many words, especially the names of places and of men in those early historic documents, and further, that the scribes who wrote and transcribed them did not all belong to one people,—always using the same language, one using the Welsh, another the Irish, while a third used the Gaelic, and ultimately the English in the twelfth century, jumb-

ling two of the forms together and coining a new word altogether, as their equivalent for the old form,—there need be no wonder at all about the diversity that exists. We have thus the *Iudeu* of Nennius changed into Edyn or Eden in the twelfth century, and the prefix Carr or Cair used instead of the Latin *urbs* of Bede and Nennius. In the passage already quoted from Nennius it says, that Oswy slew Penda in the field of Gai Campi. The identification of *Gai Campi* has never been made out by any of the commentators of that writer. There is, according to Stevenson, in three of the MSS. of Nennius' History of the twelfth century, a different word used for Gai Campi, which, if adopted as the correct one, at once clears up the mystery as to the whereabouts of this undiscovered *Campus*, and confirms in a remarkable manner my theory respecting the actual site of Bede's Giudi. The word used in these MSS. is Giti Campi—all but the identical word Giudi—the harder consonant *t* being used instead of *d*. If this reading is adopted the mystery is very much diminished, because all the other evidence as to the locality in which Bede's battle of Vinwed and Nennius' destruction of Penda and his army by Oswy, points to the district of country within a few miles of Blackness. This reading Giti Campi at once localises the battlefield, and implies that the field derived its distinctive appellation from the neighbouring Cair or stronghold Giti within the district, and not from a Cair on the island of Inchkeith, some 15 miles away, totally disconnected with that locality.

Nennius, in the early part of his History, says that the island of Britain contains twenty-eight cities, one of them is named *Cair Maunguid*. In one of the additions to Nennius' history, reference is made to a district of country called Manau Guotodin, which Dr Skene, who has thrown much new light on the early history of Scotland during the sixth and seventh centuries, identifies, in a very circumstantial manner, with the district of country lying along the Firth of Forth from the Esk to the Avon in Linlithgowshire. This city of Nennius, Cair Maunguid, is obviously only another form of Bede's Giudi, with the name of the district in which it is situated used as the prefix to the name of the city itself. The phonetic argument, I admit, is not by any means the most satisfactory mode of determining such questions as the identity of names of places,

but in this particular case it requires only the transposition of two letters in the prefix—the vowel *u* with *n*, to make it harmonise with Bede.

In the Gododin, a poem of the seventh century, by Aneurin, a Welsh bard, descriptive of a conflict between the Saxons and the Britons in the district then known as *Manau Guotodin*, *Caer Eiddyn* is mentioned several times. Dr Skene, in his notes to the Gododin poem, published in his *Four Ancient Books of Wales*, has a note explanatory of the localities mentioned in the poem. He says: “At Caredin the Roman wall terminated, and here there was a headland and a promontory jutting out into the Firth, on which was a royal castle called Blackness, where, probably, was the ‘Ynys Eiddin yn y Gogled’ mentioned in the *Benedd y Saint*.” The common assumption is that the district took its name from a castle near Bridgeness, where the Roman wall terminated. Dr Skene’s idea is by far the more probable, and it would follow that the district derived its name from the “Ynys Eidden” and the castle on it, rather than from a castle at the end of the wall. This view of the matter would go a long way in support of the theory that Blackness was the site of Bede’s Giudi and Nennius’ Iudeu—the two names being merely different forms of the same word.

II.

NOTE ON A COLLECTION OF STONE IMPLEMENTS FROM THE RHINS OF GALLOWAY. EXHIBITED BY MR JOHN M’MEEKAN, KNOCKNEEN, KIRKCOLM, THROUGH THE REV. GEORGE WILSON, GLENLUCE.

Through the kindness of Mr M’Meekan, I exhibit the best specimens in his collection of stone implements. Last summer he presented to the Museum an incised stone cross and some other articles.

1. A claystone Celt, polished, with many chip marks on the hollow face and along the straight side, butt squared 1 inch wide, edge lunate, and most worn next straight side. The edge shape is accidental. Dimensions, $4\frac{1}{8} \times 2\frac{1}{8} \times \frac{7}{8}$ inches. Found in a drain on the farm of Ardwell, Kirkcolm.

2. Black Celt or Polisher (?), finely polished except on rounded sides

near the butt, and at the butt, which is squared 1 inch wide. Edge sharp, slanted, bevelled $\frac{7}{8}$ on the flat face and $\frac{1}{2}$ inch on the rounder face. Dimensions, $3\frac{3}{8} \times 1\frac{7}{8} \times \frac{7}{8}$. Got from a relative, locality unknown. It seems to me to be foreign.

3. Wedge-shaped claystone Celt, the polished surface scaled off the broader end, rounded edge, butt, and sides. Dimensions, $6\frac{1}{4} \times 2\frac{3}{8} \times 1\frac{5}{8}$. This celt was found by Mr M'Meehan along with the flint arrow-head. No. 7, standing in the clay in the bottom of an old peat moss on Knockneen Farm. This makes the find more interesting.

4. Wedge-shaped Celt of coarse grey Silurian sandstone, edge lunate, sides and faces much rounded, butt square, $1\frac{3}{8} \times 1$ inch. Dimensions, $7\frac{5}{8} \times 3\frac{1}{4} \times 2\frac{3}{8}$ inches. Found on the farm of Float, Stoneykirk.

5. Wedge-shaped Hammer of grey diorite (?), $11 \times 4\frac{1}{4} \times 3\frac{5}{8}$ inches, with the boring of the half hole only begun on each face, the hollows being $1\frac{3}{4}$ inch in diameter and $\frac{1}{2}$ inch in depth, their centre $4\frac{1}{2}$ inches from the rounded butt. From Balgour, Kirkcolm.

6. Celt of brownish yellow flint, wedge-shaped, finely polished, edge lunate, and sharp, sides slightly flattened, one of them nearly straight, faces rounded. This curious celt was found on Wellhouse Farm, Kirkcolm. Mr M'Meehan lost it for several years, and found it again lately in the pocket of an idle boy, who had broken it across.

7. Arrow-head of flint, found with the Celt No. 3. It is a ridged flake worked on the edges, tip broken. Dimensions, $2\frac{3}{8} \times \frac{7}{8} \times \frac{3}{8}$ inches.

8. Hammer Stone of dark grey quartzite, diameter $2\frac{7}{8}$, thickness $2\frac{1}{4}$ inches, with the edge roughened all round by use. Both faces are slightly hollow, the diameter of the hollows being 2 and $1\frac{3}{4}$ inches. Found by Mr M'Meehan on Kirkbryde Farm, Kirkcolm.

9. Is a fossil naturally perforated, bead-like, $1\frac{1}{4} \times \frac{1}{8} \times \frac{9}{16}$. Kirkcolm.

Mr M'Meehan has heard that about thirty years ago a man Murphy found, on the farm of Carnside, Kirkcolm, when it was first drained, a bronze sword, which has doubtless gone to the melting-pot long ago,

III.

THE BATTLE OF GLENSHIEL. NOTE UPON AN UNPUBLISHED
LETTER IN THE POSSESSION OF C. S. HOME-DRUMMOND-MORAY,
ESQ. OF ABERCAIRNEY. BY A. H. MILLAR, F.S.A. Scot.

In December 1882 I had the privilege of submitting to the Society an unpublished plan of the Battle of Glenshiel, which the late Duke of Marlborough had courteously forwarded to me from the library at Blenheim Palace. The plan was engraved, and will be found in the *Proceedings*, vol. v. new series, p. 57. From this document I was able to show that the date usually given by historians for this battle was incorrect, and that the engagement was much more serious than some writers have believed. The plan was drawn by Lieutenant John Bastide, who was engaged on the Hanoverian side, and had doubtless been prepared for the information of the first Duke of Marlborough.

Since that paper was read I have discovered a letter, written apparently by one who sympathised with the rebels, which gives many interesting details of the action. Through the kindness of C. S. Home-Drummond-Moray, Esq. of Abercairney, the possessor of this letter, I am enabled to lay its contents before the Society. From these two documents, written by opponents on the field, an intelligible account of this conflict may at length be constructed. The date is now placed beyond dispute, since both the papers agree upon it; and the part taken by the leaders on either side can be accurately ascertained. It is satisfactory for me to find that my conjectures as to the importance of Rob Roy's share in the battle (*History of Rob Roy*, chap. xxvii.) have been fully confirmed, though advanced in opposition to several of the biographers of that chief.

ANE ACCOUNT OF THE INGAGEMENT AT GLENSHEEL, JUNE 10TH 1719.

June 15th 1719.

SIR,—When the regular forces were approaching, Tulliebardine was fully advertised both of their numbers and the day they were to march and attack, and accordingly he called a Councill of War, and by his and their unanimous

advice and consent, Brigadier Campbell made all the depositions for defending the pass and receiving the regular forces, which was in this manner.

Glensheel being straight and narrow, both sides having highland rugged hills and a water running betwixt the hills, which is the only level place there, Lord George, Macdougall of Lorn, M'Kenzie of Avoch, 100 of Seaforth's men, and 50 men of detachments, were placed upon a steep rising ground upon the south side of the Glen in an advanced Post.

The Spaniards upon the Right and Borlum M'Intosh with them.

Seaforth upon the left at some distance with 200 of his best men, upon a steep rock, the Earle of Marishall and 200 of the M'Kenzies a little below them, Sir John M'Kenzie of Coul with them and severall other Gentlemen of that name.

Tulliebardine, Locheil with 80 Camerons, Brigadier Campbell of Glendarule, and severall others such as Rob Roy were in the center, being 400 in number, where it was supposed and believed the regular troops would chiefly attack, being the most open and the best and common passage and road.

The baggage was guarded by 30 Spaniards. There is no doubt but the King's forces were advertised of all that passed in the Highlander's camp, for all that did come were welcome, heard, and were informed of all, there having a division and emulation among them who should command them in chief, in so far as that the King's troops made the best advantage of it, and instead of attacking the center, which was the best and common way, they attack't Lord George and those with him, and beat them, they giving way; Lord George, M'Dougall, and Avoch drawing their swords and crying to them to stand, but all would not doe.

That post being gained, the other where Seaforth and Marishall were, was attacked by the English and Dutch, from which they were soon beaten, and Seaforth calling for relief to support him, Rob Roy was sent from the center and others after him, to support them both, yet before they arrived Seaforth and all gave way, and the relief not being able to maintain it, returned.

Tulliebardine seeing all irreparably lost, called the Spaniards and made one orderly retreat without the loss of any of the Spaniards or others, keeping constant fire with the K.g's troops. Expecting they would all join next day and make a second tryall, but there were few or none to be had next day except the officers and the few men Locheil had, with some others, and the Spaniards.

Seaforth was shot in the arm, who behaved gallantly, but his friends were backward. In so far that it was with difficulty he had men to support him retiring to the top of the hill, and the next day very few. So that Tulliebardine was of necessity forced to grant leave and liberty to the Spaniards to surrender and make terms for their safety, there being no Meall or flour, which they could not want, and that they could not march in these rough bounds, and

wanted tents and all other Convenience for Subsisting them, which accordingly they did next day.

In all the attacks there are not upon the Highlander's side ten men kill'd and wounded.

When all was over Tulliebardine ordered Rob Roy to set fire to their Magazines and provisions, which was executed accordingly and then they all separated.

IV.

NOTICE OF ANCIENT MARBLES, &c., IN THE NATIONAL MUSEUM OF ANTIQUITIES, EDINBURGH. BY PROFESSOR A. MICHAELIS, LL.D.,
HON. F.S.A., STRASSBURG.

[In a letter from Strassburg, transmitting his paper to the Secretary, Professor Michaelis, says:—"I have the honour to send you a copy of a little paper which deals exclusively with remains of classical art preserved in Scotland, and especially with the contents of the Antiquarian Museum at Edinburgh, which I had an opportunity of examining during the great days of the splendid Tercentenary Festival of your University. I shall be much obliged to you if you will have the kindness to lay the paper before the Society of Antiquaries, among the members of which there will be no doubt many persons able and willing to contribute to the promotion of the wish expressed in the preliminary remark of my article."]

When I published my book on the *Ancient Marbles in Great Britain* (Cambridge University Press, 1882), I was fully convinced that the catalogue there given would be susceptible of many corrections and supplements. But the hope I expressed in the preface, that I should be informed of marbles existing in private collections (which might have escaped my notice) by their owners or other competent persons, has completely failed; nor have I become aware of publications concerning this matter. Nevertheless, I cannot help thinking that there must be in Great Britain a good deal of hidden treasure of the kind, which would perhaps easier come to light if there were a place expressly destined to receive such communications. Now, there can be no doubt that no place would be more appropriate to the purpose than

the *Journal of Hellenic Studies*. I have therefore ventured to propose to the Editors to open in that Journal a corner for storing up such supplements and corrections. As a first instalment, I here offer some notes which may begin the series, and which can be continued. May other lovers and students of classic art, especially in Great Britain, follow my example.

BROOM HALL (FIFE).—This seat of the Earl of Elgin, a few miles distant from the venerable old town of Dunfermline, contains a small collection of Greek marbles which, with the kind permission of the owner, I had an opportunity of examining some months ago. Although my hope of discovering among the reliefs some hitherto unknown fragment of the Parthenon has failed, still some of the marbles are deserving of particular attention. They are arranged along the walls of the spacious hall, adorned with a large portrait of the Athenian Lord Elgin, of whose labours in Greece these remains, too, are the result. As they were not comprised in the collection offered for sale to the nation in 1816, they may have been brought to Scotland at a later time. As a matter of fact, Lord Elgin, when examined, in February 1816, by the Committee of Parliament appointed for the acquisition of his marbles, expressed his belief that even after a large additional consignment of about eighty cases, which had reached England towards the end of 1812, there had arrived more cases during his absence from the country. With this supposition seems to agree what I have observed; nor has any one of the inscriptions at Broom Hall (except one which had been copied beforehand in its original place) been mentioned either in Visconti's Catalogue of the Elgin Marbles or anywhere else, which would certainly have been the case if they had been at London at the time of the sale of the main collection. Thus, this, as it were, posthumous part of the Elgin Marbles has been separated from the rest, and being a little out of the way, has remained nearly unknown up to the present day.

EDINBURGH.—A personal examination of the antique sculptures in the Antiquarian Museum (April, 1884), enables me to give a fuller and more trustworthy description of them than that given in my *Anc. Marbles*, pp. 298–300. The greater part of Lord Murray's antiquities

is now incorporated into the Museum. The plain numbers are those of the "Catalogue," division *E*; those in brackets are my own addition.

1. *Statue of youthful Asklepios*, from Cyrene, very like the statue, also from Cyrene, recently published by Wroth in the *Journal of Hellenic Studies*, iv. p. 46, with the only exception that a large corner of the *himation* hangs down from the hips, the edge of it going slantwise from the right hip to the left knee. The youthful head of the god looks up a little towards his left. The long and wavy hair falls down to the neck; part of it covers a portion of the forehead. On the head lies a twisted roll, and on it rests a very low *kalathos* (edge broken). Right arm broken at the shoulder and at the wrist, but antique; fingers of left hand which hangs down, and head of serpent wanting. The statue is otherwise in good preservation. The best part of it is the ideal-looking head; the treatment of the nude part shows an empty smoothness, that of the drapery wants clearness and simplicity in the folds across the stomach, in other parts it is rather poor. The height (4 feet 2 inches = 1.27 m.) is nearly the same as in the Cyrenæan statue of the British Museum (4 feet 5½ inches = 1.37 m.). It is evident that both these statues refer to a representation of the god of health favourite in Cyrene.

2. *Statuette of youth*, resting on his left leg, the right leg being bent backward. The upper part of the body is nude, the inferior part enveloped in a mantle which forms a kind of roll across the stomach, and a corner of which is lying on the left shoulder. Left hand on hip; the part from the middle of the upper arm to the wrist is wanting, and so is the whole right arm, which was lowered, as is indicated by a *puntello* at the right thigh. Head wanting. Near the left leg a trunk, on which the drapery falls down. Insignificant work. H. 0.50. From Cyrene.

3. *Fragment of votive relief*.—For description, see *Anc. Marbles*. The relief is tolerably high and round. The workmanship is certainly finished, but does not show great delicacy; the composition is good throughout. It may belong to the end of the fourth, or the beginning of the third century. Unfortunately the relief being hidden behind a

large glass chest, a more minute examination is impossible. H. 0·77. L. about 0·68. From Cyrene.

12. *Female head*, pleasing and rather youthful. The wavy hair is simply brushed back, but not *à la Chinoise*; a plain mantle veils the upper and back part of the head. The style reminds us of Attic sepulchral monuments of the fourth century. Nose a little battered. Tips of ears perforated for earrings. Parian marble of yellowish colour. H. 0·23. L. of face 0·15. From Cyrene.

13. *Head of bearded Dionysos*.—Along the forehead three rows of button-like curls; beard long, of conventional style; hair long, falling down to the neck. Probably part of a term. Insignificant work. H. 0·23. L. of face about 0·15. From Cyrene.

14. *Veiled female head*, similar to No. 12, but less well executed and more defaced, the whole of the nose and part of the left cheek wanting. Greyish Parian marble. H. 0·28. L. of face 0·19. From Cyrene.

15. "*Female head*, braided hair, crowned with ivy, marble, imperfect—Cyrene." Thus the Catalogue; I have not found it.

16. *Bust of Julius Cæsar*, in excellent preservation, only the back part of the left ear being restored; the right cheek, the chin, the tip of the nose, and the left eyebrow battered, the neck broken and patched; modern is also the pedestal. The thin and slightly crisped hair, very superficially executed, covers the whole cranium and goes down to the neck. The modelling of the forehead is a little overdone, the wrinkles above the nose somewhat contracted; the eyes lie very deep, and are stern-looking; nose very thick, and so are the lips; the whole part around the mouth, with its wrinkles of rather indistinct form, produces an effect of bad humour. The execution of the eyes, the lids, the inner corners, looks very modern, and generally the feebleness and indistinctness of all the details is scarcely consistent with antique art. The marble seems to be Greek, perhaps Parian, at any rate of very fine grain. Life size. Where General Ramsay bought the bust is not known.

16.* (In the Museum, E 16.) *Terra-cotta relief of Dionysos*, painted like *rosso antico*. At the upper edge of the fragments part of a cornice; below a fig branch. Of the relief itself remains only the head of youthful Dionysos, crowned with ivy, looking down with a noble expression of

thoughtfulness. All the rest is wanting. H. 0·27. L. 0·30. L. of face 0·05. Formerly in Lord Murray's collection, see *Anc. Marbles*, p. 299, No. 3.

17. *Portrait statue*, resting on the left leg, and enveloped in a cloak, which covers the whole body down from the breast to the feet, and is doubled before the stomach, the lower edge slanting from the right thigh towards the left knee. A corner hanging down from the left shoulder is grasped by the left hand. The whole arrangement has some similarity to that of the so-called Zeno of the Capitoline Museum. Right arm lowered; in the right hand a roll, but half of the forearm and the hand are replaced, and perhaps a modern restoration. The neck is inserted; however, the beardless portrait head with fat cheeks seems to be antique, and to belong to the body. Common Roman sculpture. H. about 0·50 (From the bequest of Sir James Erskine to the Royal Institution? See *Anc. Marbles*, p. 299, R. Inst. No. 2.)

20. *Small bearded head*, with gloomy expression, apparently a portrait. H. about 0·14.

[24.] *Statuette of a little girl*, draped in a double chiton, which is girded very high; narrow strings fasten the chiton at the shoulders (comp. the "Fates" of the Parthenon). The left hand holds a roll before the bosom, the lowered left grasps the edge of the overhanging part of the chiton. The big head is portrait-like; the short hair, gently curled, goes down to the neck. The whole figure reminds us very much of certain chubby girls on Greek sepulchral reliefs, and suggests the idea that the statue may have served for a similar purpose. Coarse workmanship. H. about 05·0. "From Athens. The property of John Tweedie, Esq., R.A." According to this notice, the statue cannot be identical to that mentioned in my *Anc. Marbles*, p. 299, R. Inst. No. 1, which belongs to Sir James Erskine's bequest.

[25.] *Attic (votive?) bas relief*.—A youthful horseman, clad in chiton (?), chlamys and petasos, is dashing left on a horse much like those of the frieze of the Parthenon. Both the hind legs of the horse rest on the ground, the forelegs are lifted. The youth's left knee is much bent and the lowered foot thrown backwards, the right foot advanced. Before this figure there is the remainder of another horse in rearing

position, so as to touch the ground with none of its feet; it is much smaller, and partly hidden by the former one; near it the leg and part of chlamys of a standing figure (the horseman? a servant?) who seems to try to tame the rearing animal. The main figure, which is nearly intact, is entirely of Attic character, all the outlines being sharply raised above the ground; the other figure and the second horse are treated in lower relief, as it were in the background. The left extremity of the relief is wanting. H. about 0·30. L. 0·40 (the relief is placed too high to take exact measures). Probably this is the relief Waagen saw in Lord Murray's collection, and erroneously described under two different items (*Anc. Marbles*, p. 299, Nos. 1 and 2).

[26.] *Bronze relief* of the Murray collection, No. 4 (*Anc. Marbles*, p. 299), undoubtedly antique. It is a good work, in rather high relief, and was intended to serve as an *applique*. H. 0·22. (The Nos. 5–7 of the Murray collection are not in the Museum.)

F. V. 23. *Roman cippus*.—Square bordered front, with a youthful bust clad in *tunica* and *pallium*, within a sunk field of irregular shape. Beneath the inscription :—

DIS · MANIBVS
C · IVLIO · RVFO · VIX · ANN · XVIII · M · VI
PIENTISSIMO
PARENTES · ARAM · POSVERVNT

H. 0·72. L. 0·54.

I add two inscriptions evidently originating from some *columbaria* :

[27.]
D · M
C · ACILIOBASSO
MEDIC · DVPLIC
COLLEGAEIVS

Elegantly incised letters. Ed. *Proceedings Soc. Antig. Scotl.*, 1870–72, vol. ix. p. 7. A gift from Sir Walter Simpson, Bart., Dec. 1870.

FAVSTILLAPLAI
CLEMENTIS · SER
PIA · VIX · AN · XX · H · S · E
HERMEROS CAESARIS · N · SER
TABELLAR · CONIVG · PIAE · F ·

Letters of artificial character, very deeply cut. *Ed. Proceedings, &c.*, 1879-80, vol. ii., new series, p. 91. From the bequest of David Laing, LL.D., F.S.A. Scot., 12th Jan. 1880.

The most recent addition to the Museum consists of a large collection of *Attic vases*, the gift of Lady Ruthven of Winton Castle (Feb. 1884). It is particularly rich in lecythi, mostly of small dimensions, and contains specimens of all styles, from the older ones with brownish, and with black figures down to those with white or with red figures, and even of the style of Magna Græcia. Of mythological subjects I have noticed only two; both on *nasiterni* with black figures on red ground:—Herakles seizing the Centaur Nessos, from whom Deianeira is running away with upraised arms, the whole scene flanked by two youths with staves; and a warrior and an Amazon fighting over a dead warrior lying on the ground, again flanked by two warriors. (Among the older elements of the Edinburgh collection, there are some very well preserved specimens of vases with geometrical patterns, without any figures.) The two remarkable *sepulchral reliefs* in Lady Ruthven's possession (see *Anc. Marbles*, p. xxvii), are still at Winton Castle; No. 1, of which I saw a photograph in Prof. Baldwin Brown's possession, is exceedingly fine.

[Since Lady Ruthven's death the sepulchral bas-reliefs here alluded to have been received by the Board of Trustees, along with other articles, forming part of a bequest by Lady Ruthven to the National Gallery of Scotland.]

V.

PROPOSED CORRECTION OF THE TEXT OF "LEGES INTER BRETTOS ET SCOTTOS." BY CAPTAIN F. W. L. THOMAS, R.N., F.S.A. Scot.

In the *Acts of the Parliaments of Scotland* are the interesting "Leges inter Brettos et Scottos,"¹ of which a section gives the amount of "cro" or fine for killing a man in either of the ranks into which society in Scotland was then divided. The "Leges" are in Latin, French, and English, or rather Lowland Scotch of the fourteenth century.

The cro of the King of Scotland is 1000 cows, or 3000 oz. gold, at 3 oz. for a cow.

The cro of the son of the King, or of an Earl² of Scotland, is 150 cows, or 450 oz.

The cro of the son of an Earl, or of a Thane (the equivalent of a Norman Baron), is 100 cows, or 300 oz.

The cro of the son of a Thane is $66\frac{2}{3}$ cows, or 200 oz.

The cro of a grandson (nepos) of a Thane, or of an "Ogethearn"³ (freeholder) is 44 cows + $21\frac{2}{3}$ pence.

All that are lower than these in kin are Carls (vilayns, rustici; later nativi).

The cro of a Carl is 16 cows.

The text is wrong in stating the ounces to be of gold, and again, that the cro of an ogthiern is 44 cows + $21\frac{2}{3}$ d. For the French version omits "gold;" and besides, if 1000 cows = 3000 oz. gold, then 1 cow = 3 oz. gold = 36 oz. silver = £2, 8s., which is absurd;⁴ and the true reading is 3000 oz., silver being understood. The "gold" has been added by some patriotic scribe; but 1 cow = 3 oz. silver.

The cro of an Earl was 150, of a Thane was 100, of a Thane's son

¹ *Loc. cit.*, vol. i. pp. 665-67.

² The lives of men were much cheaper, or cattle were much dearer, in Ireland; for the *Enachlann*, or cro of a provincial king, was but twenty-four cows.—Skene, *Celtic Scotland*, vol. iii. p. 153.

³ Cf. Sir J. Skene, *De Verborum*; s.v. W. F. Skene, *Celtic Scotland*, vol. iii. p. 242.

⁴ The legal value of "the cow" during the twelfth and thirteenth centuries, and probably the eleventh, may be taken at four English shillings for Scotland, Ireland, and the northern counties of England.—Robertson, *Hist. Essays*, p. 135.

was $66\frac{2}{3}$ cows. It is seen that the cro of each rank is *one-third* less than the cro of the next preceding rank, or, which is the same thing, the cro of any rank is one-half more than the cro of the rank next below it. On this theory the cro of an Ogthiern is $44\frac{2}{3}$ cows. In the text above, the cro of an Ogthiern is stated to be 44 cows and $21\frac{2}{3}$ d. Hence, $\frac{1}{3}$ cow should be of the value of 21 pennies and two-thirds, and $21\frac{2}{3}$ d. should be equal to $\frac{2}{3}$ ths of 3 oz. of silver. But $21\frac{2}{3}$ d. will not make even numbers, while by assuming that the correct figures are $21\frac{1}{3}$ d., the ounce of silver is found to be 16 pence. For, if $\frac{1}{3}$ cow = $21\frac{1}{3}$ d., then 1 cow = 48d. = 4s. = 3 oz. silver; and 1 oz. silver = 16d.¹ This view is confirmed on the next page (664), where the "kelchin" of a thane is "xliiii ky and xxi pennis and twapert of a half peny," (in French, "mayl").

The foundation of the table seems to have been the cro of a thane = 100 cows = 300 oz. silver = 400s. = £20 = 30 marks.

Judging from their cros, a thane was worth but two-thirds of an earl, or one-tenth part of a king; but he was worth one and a half of thane's sons, or two and a quarter ogthierns or freeholders, into which rank the grandson of a thane had descended.

Below are the correct cros in a tabular form.

Rank or Degree.	Cows.	Silver.	Marks.	£ s. d.	Ratio.
Cro of King,	1000	3000 oz.	300	200 0 0	10
„ King's son, or an Earl,	150	450	45	30 0 0	$1\frac{1}{2}$
„ Earl's son, or a Thane, .	100	300	30	20 0 0	1
„ Thane's son,	$66\frac{2}{3}$	200	20	13 6 8	$\frac{2}{3}$
„ Thane's grandson, or an Ogthiern,	$44\frac{2}{3}$	$133\frac{1}{3}$	$13\frac{1}{3}$	8 17 $9\frac{1}{2}$	$\frac{1}{2}$
„ Carl, Villain, or Rusticus,	16	48	$4\frac{2}{3}$	3 4 0	$\frac{1}{5}$

There is good reason why the cro of a carl, viz., 16 cows, ceases to follow the usual proportion, for if a carl were one grade below an Ogthiern, his cro would have contained the unmanageable fraction of $29\frac{17}{27}$ cows; if two grades, $19\frac{11}{27}$ cows, and so on; but why the cro of a carl should have been fixed at 16 cows = 48 oz. silver, is not apparent.

¹ "16d."—Cf. Cochran-Patrick, *Records of the Coinage of Scotland*, p. lxxvii.

MONDAY, *9th February* 1885.

PROFESSOR DUNS, D.D., in the Chair.

A Ballot having been taken, the following Gentlemen were duly elected Fellows :—

G. BENNET CLARK, W.S., 15 Douglas Crescent.
 Col. CHARLES ELLIOT, C.B., Hazelbank, Murrayfield.
 JAMES TULLOCH GOUDIE, Janefield, Pollokshields.
 JAMES J. MACLEHOSE, M.A., 61 St Vincent Street, Glasgow.
 WILLIAM HUNTER MARSHALL of Callander, W.S., 25 Heriot Row.
 Rev. ALEXANDER D. MURDOCH, Incumbent of All Saints' Church,
 Edinburgh.
 Rev. JOHN WYLIE RODGER, Presbyterian Church, Wolverhampton.

The following Donations to the Museum and Library were laid on the table, and thanks voted to the Donors :—

(1) By R. B. Æ. MACLEOD of Cadboll, Esq.

A Collection of Drawings, Engravings, &c., Archæological, Topographical, and Heraldic, illustrative of *La Divina Commedia di Dante Alighieri*, collected and arranged by Miss Elizabeth Macleod of Cadboll, in the years 1832–1848 inclusive. The heraldic and other illustrations, taken from the antique works in the private library of the late Grand Duke of Tuscany, in the Pitti Palace, Florence, from the Laurentian and Magliabecchian public, and other private libraries ; as also from the walls of ancient palaces in various parts of Italy. Arranged in 5 vols.

(2) By JOHN RÆ, Aberdeen, through Dr ARTHUR MITCHELL, Vice-President.

A series of Casts, coloured in facsimile, of Stone Implements, &c., in his collection, comprising—

Cast of Stone Cup, 4 inches diameter, with perforated handle, and ornamented with a triple band of zig-zags below the rim, found at Methlick, Aberdeenshire.

Cast of Stone Cup, 4 inches diameter, with perforated handle, and ornamented with a band of herring-bone pattern under the rim, found in levelling a cairn at Knockwhan, Aberdeenshire.

Cast of Stone Cup, 4 inches diameter, with perforated handle, and ornamented with two incised lines parallel to the brim, found in removing a cairn at Cromar, Aberdeenshire.

Cast of Stone Cup, $3\frac{1}{2}$ inches diameter, imperfect, rudely ornamented with incised lines, the handle partially perforated, found in a garden in Aberdeen.

Cast of a Stone Cup, rudely formed from a triangularly-shaped stone, ploughed up in a field at Alford, Aberdeenshire.

Cast of a Stone Cup, $4\frac{5}{8}$ inches diameter, imperfect, with handle, ploughed up at Lumphanan, Aberdeenshire.

Cast of Stone Cup, $4\frac{7}{8}$ inches diameter, imperfect, the handle partially perforated, found at Pitcaple, Aberdeenshire.

Cast of Stone Cup, oblong, $4\frac{1}{4}$ by $2\frac{1}{8}$ inches, and $\frac{5}{8}$ inch in depth, found at Rhynie, Aberdeenshire.

Cast of Stone Cup, 5 inches diameter, without handle, found at Cowie, Kincardineshire.

Cast of Stone Ball, $2\frac{3}{4}$ inches diameter, with six projecting circular discs, found at Leslie, Aberdeenshire.

Cast of Stone Ball, $2\frac{5}{8}$ inches diameter, with six circular projecting discs, found in the Red Moss, Bellhelvie, Aberdeenshire.

Cast of Stone Ball, $2\frac{3}{4}$ inches in diameter, with six circular projecting discs, found at Kinellar, Aberdeenshire.

Cast of Stone Ball, $2\frac{3}{4}$ inches in diameter, with six circular projecting discs, found at Methlick, Aberdeenshire.

Cast of Stone Ball, $2\frac{7}{8}$ inches in diameter, with six circular projecting discs, found at Fyvie, Aberdeenshire.

Cast of Stone Ball, slightly ovoid, $3\frac{1}{8}$ by $2\frac{3}{4}$ inches, with five circular projecting facets or discs, found at Newhills, Aberdeenshire.

Cast of Stone Ball, $3\frac{1}{8}$ inches diameter, with four small and four

large circular projecting discs placed round the circumference unsymmetrically, found at Methlick. (See fig. 1.)

Cast of Stone Ball, $2\frac{3}{4}$ inches diameter, with four circular convex facets or discs, placed unsymmetrically round the circumference, found at Dyce, Aberdeenshire. (See fig. 2.)

Cast of Stone Ball, $2\frac{1}{2}$ inches diameter, the whole circumference covered with small projecting knobs, found at Countesswells, Aberdeenshire.

Cast of Stone Ball, $3\frac{7}{8}$ inches diameter, covered with small projecting knobs, found at Rhynie, Aberdeenshire.



Figs. 1, 2. Stone Balls found at Methlick and Dyce, Aberdeenshire ($3\frac{1}{8}$ and $2\frac{3}{4}$ inches diameter).

Cast of Stone Ball, 3 inches diameter, one side of which is ornamented with six small projecting circular knobs, the rest of the surface plain and apparently unfinished, found at Inch, Aberdeenshire.

Cast of Stone Ball, 3 inches diameter, with six projecting circular discs, found in Morayshire.

Cast of Stone Implement, apparently an oblong water-worn pebble of quartzite, flattened on one end, and with a slight groove round the middle, found in Strathdon, Aberdeenshire.

Cast of Stone Implement, $2\frac{1}{2}$ inches in length, apparently an oblong water-worn pebble of quartzite, flattened at both ends, and having a slight groove worked round the middle.

Cast of Stone Implement, 4 inches by 3 inches, being an oblong, rounded,

water-worn pebble, with slight longitudinal grooves passing round the circumference and crossing each other at the ends, and a transverse groove crossing those in the middle, found at Murtle, Aberdeenshire.

Cast of Stone Implement, 3 inches by $1\frac{3}{4}$ inch, being a circular, flattened, water-worn pebble, with grooves passing round the circumference and crossing each other at right angles in the centre, found on Deeside, Aberdeenshire.

Cast of a perforated Axe-head of dark-coloured stone, $5\frac{1}{2}$ inches in length, $3\frac{1}{4}$ inches across the cutting face, tapering to a conically pointed butt, and pierced in the middle of its length by a shaft hole, 1 inch in diameter, found at Rhynie, Aberdeenshire.

(3) By the late Mr THOMAS MACKENZIE, Applecross, through Mr JOHN CAY, W.S.

Socketed Celt of bronze, $3\frac{5}{8}$ inches in length, $2\frac{3}{4}$ inches across the cutting face, with side-loop and oval-shaped socket, $1\frac{1}{2}$ inches by $1\frac{1}{8}$ inch diameter, found in the parish of Strath, Skye. This is a good typical example of the variety of socketed axe-head which is of most frequent occurrence in Scotland. They are often found singly, but not unfrequently they form portions of hoards or deposits, consisting of numbers of articles of various descriptions. A socketed axe-head of this special variety formed part of a hoard of bronze implements, found in digging a drain on the Castle Hill of Forfar, presented to the Museum by the late Mr A. Jervise, F.S.A. Scot., in



Fig. 1. Bronze socketed Celt, found at Strath, Skye ($3\frac{5}{8}$ inches in length).

1855. The hoard consisted of a spear-head, $6\frac{1}{2}$ inches long, ornamented by two bands of parallel lines round the socket, and four socketed axe-heads, of which three are shown in fig. 2. The longest of the three, which is more chisel-shaped than the others, measures $4\frac{1}{8}$ inches in length by $1\frac{3}{8}$ inch across the cutting face; the socket is circular, the upper part

or neck of the blade is twelve-sided externally, and ornamented above the loop by a band of four parallel lines passing round the neck. The other two specimens exhibit the common variety of short-necked axe with oblong socket, corresponding to the example found at Strath.



Fig. 2. Three socketed Axes of Bronze, part of a hoard found at Forfar.

A collection of about ninety Coins, Tokens, Medals, &c., chiefly in Copper.

(4) By Dr W. IRVINE, F.S.A. Scot., Pitlochry.

Stone formerly used as a curing-stone, and latterly for pounding salt, from Ballintruim, Strath Tummel. It is a circular, flattened water-worn pebble of a bluish colour, about 4 inches in diameter, by $2\frac{1}{4}$ inches in greatest thickness. Dr Irvine, in a note accompanying the donation, says:—"This stone was found on the farm of Ballintruim, Strath Tummel. The farmer's mother, an old woman of ninety years of age, told me that she remembered it as long as she remembered anything, and that it had been considered as an heir-loom from the time she first

recollected it. The stone had always been regarded as a family possession, and the tradition relating to it is that it was possessed of healing virtues. Though the present tenants of the farm do not share that belief, the stone has long lain in the large wooden salt-box in the ingle-neuk, and has been used for the purpose of pounding the salt when it caked. The family, however, still continue to set a high value on the stone, and gave it to me as a very great favour."

(5) By Mr A. LUMSDEN, Addiewell Chemical Works.

Large wedge-shaped Stone Hammer of whinstone, perforated for the shaft, and measuring $9\frac{1}{4}$ inches in length, 4 inches in greatest width, and 3 inches in thickness, imperfect at the pointed end, found in West Calder.

(6) By Mrs COVENTRY of Shanwell.

Cinerary Urn, 14 inches high, from a Bronze Age Cemetery at Shanwell, Milnathort, Kinross-shire. [See the subsequent communication by Dr Joseph Anderson.]

(7) By Mr R. C. SANDERSON, through Dr JAMES SANDERSON, F.S.A. Scot.

Two Masks of bronze, dug up at Canajore, Mudgere *taluk*, Mysore, India. [See the subsequent communication by Sir Walter Elliot.]

(8) By JAMES BURGESS, LL.D., Archæological Surveyor and Reporter to Government for Western India.

Two Indian Weapons—a Khuttar and Nepaulese Knife.

(9) By EDMUND GOLDSMID, F.S.A. Scot.

Medal in Bronze :—*Obv.* Napoleon Emp. et Roi ; *Rev.* Descente en Angleterre ; *Ex.* Frappe à Londres en 1804.

- (10) By **GEORGE A. PANTON, F.S.A. Scot, and GEORGE LORIMER, F.S.A. Scot.**

Leaves from The Buik of the West Kirk—MS., with Photographic Facsimiles.

- (11) By the **KIRK-SESSION OF THE WEST KIRK**, through **GEORGE LORIMER, F.S.A. Scot.**

Information for the Poor of the West Kirk against Henry Nisbet, jun., of Dean, 1681 (Duplicate). [See the subsequent communication by Mr Lorimer.]

- (12) By **Mr J. MILNE, Photographer, St Ruth's, Arbroath.**

Photograph of Card with Medal worn by the men in the work-yard of the Bell Rock Lighthouse, to prevent their being seized by the Press-gang. The medal, which is about $\frac{3}{4}$ inch in diameter, bears on obverse a Lighthouse with a Buoy and Beacon, and the inscription **IN SOLUTEM OMNIUM, NORTHERN LIGHTHOUSES**; on reverse an inscription only:—**MEDAL REFERRING TO ADMIRALTY PROTECTION, AND A DESCRIPTION OF THE PERSON BY THE ENGINEER.** The card, in one corner of which the medal is fastened by loops, has on one side the written inscription:—

James Dryden to be employed in the craft at the Bell Rock. The signature of the Engineer's Clerk.
LACHLAN KENNEDY.

On the other side is the following inscription, also in writing:—

**BELL ROCK WORK-YARD,
Arbroath, 2nd May 1809.**

James Dryden, seaman in the service of the Hon. The Commissioners of the Northern Lighthouses—aged twenty-six years—six feet high—black complexion—marked with the small pox.

**ROBERT STEVENSON,
Engineer for Northern Lights.**

On the card there is also a docquet:—

Edinburgh, 25th November 1815.—This ticket and medal of protection presented to Mr Kennedy by R. S.

(13) By the PRESIDENT AND COUNCIL OF THE ROYAL SCOTTISH ACADEMY.

Annual Report of the Royal Scottish Academy.

(14) By THE BOARD OF MANUFACTURES.

Scottish National Portraits, Catalogue of Loan Exhibition. Presentation Edition. 4to. 1884.

The following Communications were read :—

I.

NOTICE OF THE EXCAVATION OF ST NINIAN'S CAVE, PARISH OF GLASSERTON, WIGTOWNSHIRE. BY SIR HERBERT EUSTACE MAXWELL, BART., M.P., F.S.A. SCOT.

There is a cave on the shore of Glasserton, about three miles from the Cathedral of St Martin at Whithorn, and an equal distance from the chapel at the Isle, which is supposed to occupy the site of the original building raised by St Ninian, who brought masons from Tours,¹ A.D. 397. To this cave local tradition has long assigned the honour of having been the retreat chosen by St Ninian for purposes of prayer and meditation. Symson² refers to it; and in the *Lives of the Saints* (Toovey, London), pp. 131, 132, the tradition is mentioned.

The general aspect of the cliffs and shore is westerly, but the cave opens to the south, in an angle formed by the projecting cliff with the shingly beach which stretches across the mouth of Physgil Glen. It is situated about 25 feet above the present high-water limit, and has been excavated in the Lower Silurian greywacke rocks by the action of the

¹ "Beatus Ninianus a sancto (Martino) cementarios sibi dari postulavit, propositum sibi esse asserens, sicut sancte Romanæ ecclesiæ fidem, ita et mores in construendis ecclesiis, ecclesiasticisque officiis constituendis, imitari."—"Vita Niniani," *Historians of Scotland*, p. 143.

² *A Large Description of Galloway*, by Andrew Symson, Minister of Kirkcinner, 1864, p. 15.

waves of a sea which, in a bygone geological period, washed a raised beach, of which portions remain in various places along the coast of Wigtownshire. The cave is hollowed out in a line of fault in the contorted bedding of the rock.

In 1871, it was visited by the late Dean Stanley of Westminster, who was then on a visit at Monreith, and was preparing his *Lectures*



Fig. 1. Incised Cross on the west side of the entrance to St Ninian's Cave.

on the *History of the Church of Scotland*. On that occasion Mrs Maxwell of Carruchan, being of the party, detected an incised cross (fig. 1) upon the rocks (at A on the ground plan, see fig. 7), at the west side of the entrance.¹ Since then no further traces of Christian work were

¹ "We can explore the cave called by his (St Ninian's) name, which opens from beneath the samphire covered cliff, undermined by the waves of Glenluce Bay; and on which a rudely carved cross still marks the original sanctity of the spot, where, following the practice of his master, St Martin of Tours, he may well have retired for his devotions."—Stanley's *Lectures on the Church of Scotland*. John Murray, London, 1872.

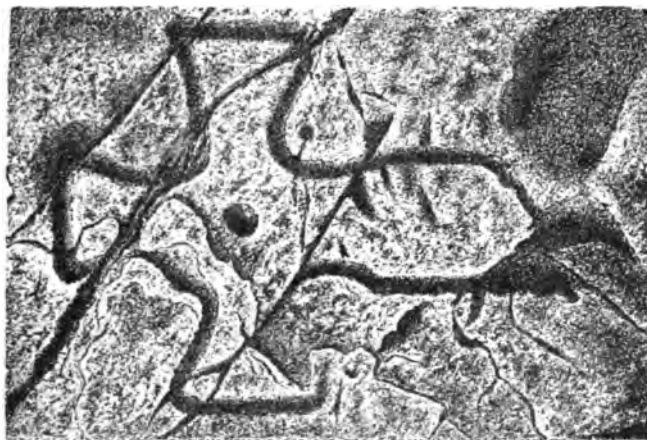
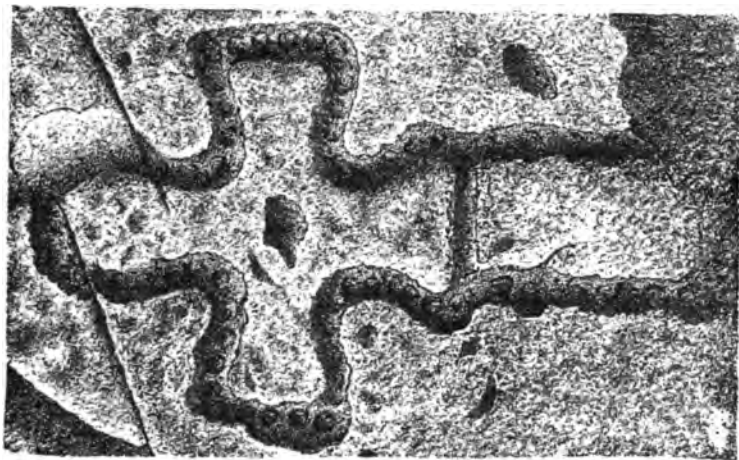


Fig. 2. Stone with crosses (20 inches in length).



Fig. 3. Stone with crosses (25 inches in length).

Figs. 2, 3. Stones bearing each a double incised Cross, found in St Ninian's Cave.



Figs. 4, 5. Crosses incised on the west side of St Ninian's Cave.

observed until last year (1883), when some members of Mr Nicholson in Kidsdale's family discovered, in or near the ruined wall which at some period had been built across the mouth of the cave, a stone bearing two incised crosses (fig. 2). This fresh discovery led to further desultory search by various persons. One other carved stone (fig. 3), also bearing two incised crosses, was found, and was presented by Mr Johnston Stewart to the Museum of Scottish Antiquities.¹ Then Mr Andrew Kerr, gamekeeper, dug away some of the cliff débris immediately under the cross discovered by Mrs Maxwell, and exposed two others (figs. 4, 5), of similar shape to the first, and a third imperfect, 2 feet 4 inches below the first, and in a horizontal line with each other, measuring 11 inches from centre to centre of each cross.



Fig. 6. Small Cross incised on the west side of St Ninian's Cave.

Twelve feet farther out, on the same side, there is a small cross of a different character (fig. 6), cut on the rock face.

On Monday, 2nd June 1884, in company with Mr Nicholson and Dr Douglas of Whithorn, I visited the cave, having with me also three working men. At that time the floor of the interior, though perfectly dry, was covered with rubbish, shingle, ashes of kelp-burning and picnic fires, pigeon and rat droppings, &c.

The wall at the mouth was partly exposed, but much dilapidated.

Between the group of incised crosses and the wall at the mouth of the cave, a distance of 27 feet, lay a huge mass of débris, earth and rocks, fallen from the cliffs above. In deciding where to commence operations we had to consider the relative probability of this mass having fallen before or after St Ninian's occupation. The fact that three

¹ These two stones with incised crosses were figured in the *Proceedings*, vol. v. (new series), pp. 320, 321, in a paper entitled "Notice of Crosses found in St Ninian's Cave, Glasserton, Wigtownshire," by Christopher N. Johnston, Advocate.

crosses had been exposed on the rock face by digging into this mass, proved that part of it, at all events, had fallen since the days of the saint.

Accordingly, we determined to commence a cutting through the mound and along the rock face, starting from the group of crosses above mentioned at A (see the annexed ground plan, fig. 7).

The first day's labour took us to B, where we reached a depth of 7 feet, without having gone down to the old cave floor. We had, however, reached a level, standing upon which a person could have cut the three lower crosses at A. At all depths, from 4 feet to 7, we found traces of fires, with wood cinders, bones, and limpet and whelk shells; showing that this part of the former cave had been occupied before and after successive falls of earth and rocks from the roof. This roof no longer exists beyond the limit marked by the old wall.

After proceeding 13 feet inwards at C, at a depth of 3 feet 6 inches, the end of a built stone drain was laid bare. A round stone lay at the mouth; the drain was carefully formed and packed, and water still ran freely through it. Its dimensions were—length, 14 feet 7 inches; width, 8 inches; depth, 6 inches.

Recommencing next morning, we followed this drain to its commencement at the mouth of the cave D. Here it was wider, built with larger stones, and covered with a heavy flag of greywacke. Resting on a large flat stone at E, buried under 18 inches of débris, and close to the upper end of the drain, was a large water-worn boulder, 19 inches longest horizontal diameter, 14 inches high, in which was cut a circular basin, 7 inches wide by 5 inches deep. A small rill, which falls over the mouth of the cave, descended straight upon this basin. The waste water, which otherwise would have run back into the cave, was carried away by the drain DC. Near it at F, 2 feet below the surface, a stone with incised cross was turned up.

The wall GG, was next cleared, and found to be built of dry stone, 28 inches thick. In clearing the rubbish some of the stones were so large that they had to be broken before being removed. Unfortunately, two large rectangular blocks were so treated and wheeled away before it was discovered that they were the two upper steps of a stair (H),

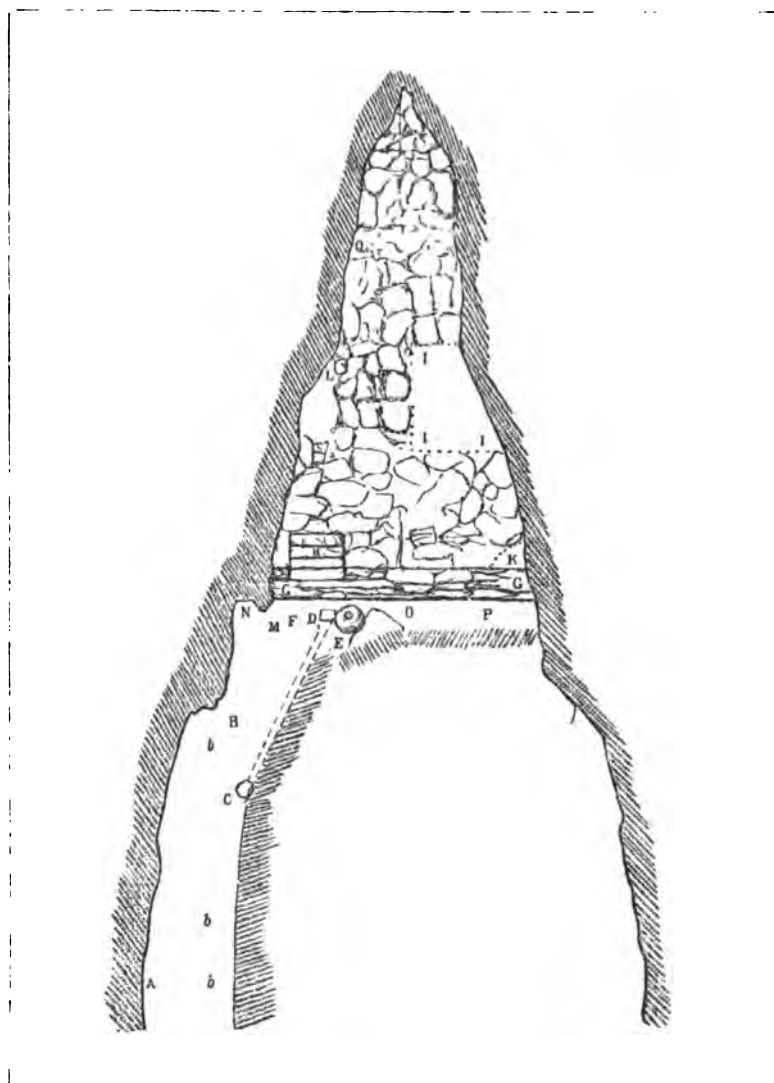


Fig. 7. Ground plan of St Ninian's Cave (scale, 10 feet to an inch).

descending into the cave. The two lower steps were kept *in situ*; the descent from the old threshold to the inner floor being 3 feet. On the rise of the lowest step, which is 2 feet 4 inches long, 1 foot 6 inches wide, and $8\frac{1}{2}$ inches high, there are three incised crosses, each surrounded by a circle (see fig. 12).

On the lowest step of the stair lay a rudely-carved stone, showing crosses of a peculiar shape (fig. 8), and farther, towards the inside, lay another stone engraved with a cross.

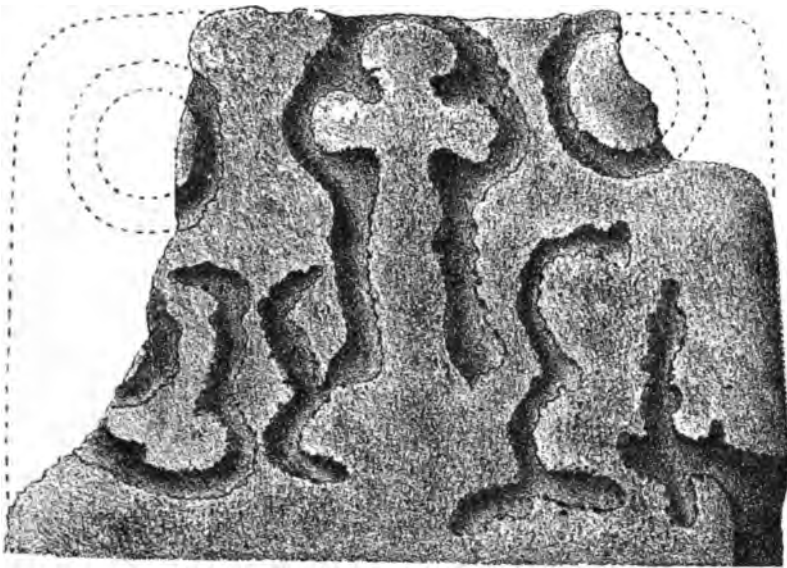


Fig. 8. Stone with incised Cross, found in St Ninian's Cave.

We then proceeded to clear out the rubbish in the cave, which, level with the top of the wall at the mouth, diminished to an average depth of 18 inches or 2 feet over the rest of the interior. The floor was found to be completely paved with flags throughout its entire length, 27 feet, except at one place, I I I, where there is a space, 6 feet by 3 to $4\frac{1}{2}$ feet, unpaved, but floored with hard beaten earth; and at K, near the

entrance, where there is an open depression for the escape of rill water which runs down the cave wall at this place, depositing stalagmite.

The pavement near the stair was fire-marked, and covered with wood ashes, bones, and shells.

Within the cave, at L, carved on the rock 3 feet above the pavement, is a faintly incised cross, similar in design and size to those at A outside.

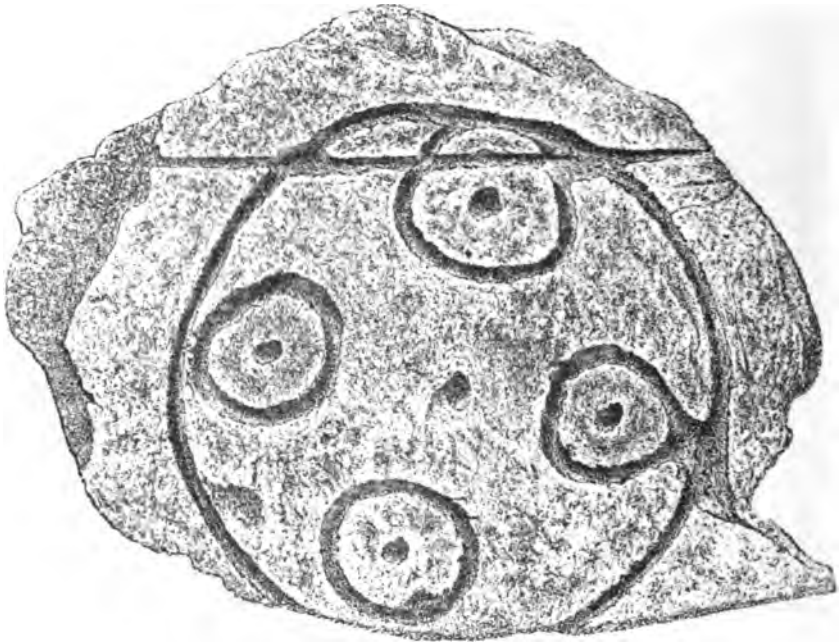


Fig. 9. Stone with incised Cross, found in St Ninian's Cave.

Upon the flagstone immediately beneath it is a rudely cut inscription, of which only the letters

S	A	N	C	T
N	I			P

 can be traced. Farther in the cave, on the same side, a young lady, visiting the cave some days afterwards, descried another cross.

After sweeping the floor of the cave we returned to the excavation

outside. At a depth of 3 feet a stone with incised cross (fig. 9) was found at M. The angle in the solid rock at the entrance N had been used as a fireplace, and was filled with cinders, bones, and shells, covered with 2 or 3 feet of loose débris. Another stone (fig. 10) broken, with crosses incised, was turned up outside at O.

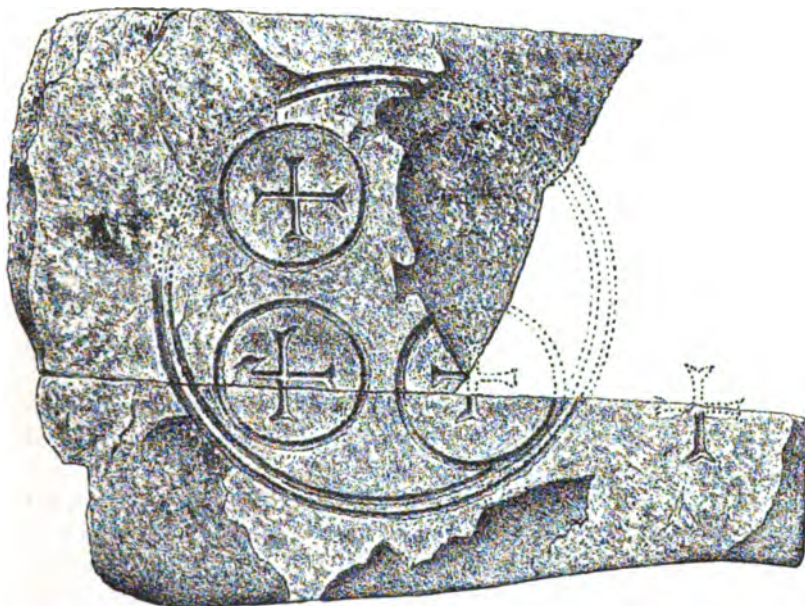


Fig. 10. Stone with incised Cross, found in St Ninian's Cave.

The following morning I had to go to London, leaving Mr Cochran-Patrick (who had joined us the previous day) and Dr Douglas to superintend the work. The outside of the wall was laid bare, but no trace of pavement corresponding to that inside was found. Fireplaces, bones, and shells continued to be noticed. Immediately outside the wall at P, 6 feet deep, below a large block of stone, human remains were discovered.

The skull was first noticed, then the right femur, left femur, scapula, clavicle, and tibia. The greater part of the skeleton was recovered.

The bones were much decayed, and the body was doubled up, the skull lying between the legs. No signs of regular interment, clothing, or weapons accompanied the remains.

Next day, June 6th, Mr Cochran-Patrick having left, Dr Douglas superintended the removal of the wall. Two stones were found built into it as material, showing that, at all events, the wall was a more modern structure than the date of the original use of the cave as a place of Christian retreat.

The wall was then carefully rebuilt, and subsequently Mr Johnston Stewart caused an iron railing with locked gate to be placed across the mouth of the cave. The carved stones are all deposited inside, and the place now forms an interesting object to visitors, the key of the gate being kept by Mr Nicholson at Kildale.

No manufactured relics other than the carved stones were found in the cave, except a copper farthing and some iron bolts and nails, the remains of recent temporary occupation. A small whetstone, 4 inches long, of water-worn sandstone, similar to several discovered in crannogs in the district, was also found.

Also Mr William Galloway, when engaged in executing the drawings which accompany this paper, found a water-worn beach stone, engraved with a small cross.

Whatever opinion may be formed as to the date of the pavement, the tradition connecting the cave with St Ninian has received notable confirmation by the discoveries made. Mr Cochran-Patrick was inclined to view the pavement as of a date long subsequent to St Ninian's occupation, and to infer from it the use of the cave as a chapel in mediæval times. There appears, however, to be a direct connection between the pavement and the crosses on the live rock, as shown by the inscribed stone in the pavement *immediately* under the cross within the cave. These crosses are all of an early design, and have been executed with a rude-pointed instrument. The fact that the wall contained several stones carved with crosses shows that it was built, or at least reconstructed, by persons regardless of the sacred emblem.¹ The slab form-

¹ Since writing this I have seen the head of an early Christian cross taken out of the wall of the chapter-house of the Abbey of Luce, where it had been used by

ing the lower step of the stair, carved with a triple cross (as shown in



Fig. 11. Small Boulder with incised Cross, found in St Ninian's Cave.

the annexed illustration of the interior of the cave after excavation,

fourteenth century masons as ordinary building material. Later instances of such desecration of course are common enough, but this is an interesting instance of neglect of pristine sacred art in an ecclesiastical edifice.



Fig. 12. St. Ninian's Cave, Glosserton, Wigtownshire (*Interior View, looking outwards, after excavation*).

fig. 12), may probably have been designed for special use of another kind ; at all events the pedestal or short shaft, indicated in the lower cross, appears to point to an intention of placing the stone erect. No doubt the cave was used from time to time by smugglers, kelp-burners, and others ; and some of the materials would be rearranged, though the general features remain the same.

It is natural, considering the sacred character of the place and the numerous sacred emblems displayed in it, to assign to the stone basin the function either of a baptismal font or a holy water stoup. Carefully arranged so as to receive the rill falling over the cave mouth, and with the drain provided to carry off the overflow water, it is difficult to disregard the possibility of its having been designed and used as a font. On the other hand, the convenience of a reservoir of pure water for domestic use would be apparent to any person inhabiting the cave. In the rocks surrounding St Medan's Cave in Kirkmaiden, on the opposite side of the Bay of Luce, there are several round pot-holes, in which the people used to bathe on the first Sunday in May at sunrise, a process which was considered an infallible cure for sundry diseases, but especially in the cases of "back-gane bairns." In these the water, being salt, would have been useless for domestic purposes, but may possibly have been used for baptismal purposes by the missionaries of the primitive church, an end for which this artificial basin may have been prepared by the successors of St Ninian. It must, however, have been placed in the position in which we found it *subsequently* to the fall of the greater part of the cliff débris ; the drain from it is cut through this débris, the bulk of which appears to have fallen *since* the three lower crosses at A were carved. If St Ninian used it as a font, which is at all events not impossible, it must have been rearranged in its present position during subsequent occupation. It is to be remembered that Galloway relapsed into paganism after St Ninian's day.

The traces of fire and organic remains, under and through the mass of fallen cave roof *outside* the existing cave, indicate that this cavern has long been used as a human habitation. No doubt, if the pavement were lifted, further similar remains would be found, but its destruction for such a purpose is much to be deprecated. The numerous caves,

some of them abounding in stalagma, which occur at the raised beach level all round the adjoining coast, form an interesting field for pre-historic research. No conjecture can be made as to the history of the human skeleton outside the wall; whether it was the subject of an ordinary contracted burial, without cist, and with the huge block of stone intentionally rolled over it, whether it belonged to a person accidentally killed by a fall of rock from above, or whether he was the victim of a long-forgotten outrage, is equally undeterminable. Only this is certain, that he died sufficiently long ago for all trace of clothing to have disappeared.

Our thanks are due to Mr Johnston Stewart for the facilities he readily afforded for exploration, and to Mr Nicholson for his hearty co-operation and assistance in the work.

Dr John Cleland, Professor of Anatomy in the University of Glasgow, has made the following report upon the bones found in the course of the excavation:—"These consist mainly of small portions of large bones, probably all of the ox. There is a distinct head of a right scapula of the ox, and a less characteristic fragment which may be from the same bone, also a right os calcis and portion of right ulna of ox. There are also a tail bone and a portion of lower part of humerus belonging to a smaller animal, probably sheep or goat. Lastly, there are a femur and part of a tibia of a small bird, possibly a jackdaw; and a portion of a shaft of femur (?) and part of a tibia of a larger bird, possibly a fowl or pheasant."¹

¹ Professor Cleland has recently made an interesting discovery among some bones forwarded to him during the present summer from St Medan's Cave above referred to. He pronounces one of them to be the lower two-thirds of a human tibia, "highly platynemic." The platynemic tibia is characteristic of a race of men light of frame and exceedingly swift of foot.

II.

NOTICE OF TWO BRONZE MASKS DUG UP AT KANAJOR, IN THE PROVINCE OF MYSORE, INDIA, AND NOW PRESENTED TO THE MUSEUM BY MR R. C. SANDERSON, THROUGH DR JAMES SANDERSON, F.S.A. Scot. BY SIR WALTER ELLIOT OF WOLFELE, K.C.S.I., F.R.S., F.S.A. Scot.

The two bronze masks presented to the Museum by Dr Sanderson in the name of his son, Mr R. C. Sanderson, were discovered by him about 15 inches under the surface of the ground in his coffee plantation, at Kanajor,¹ and were sent to me for any information I might be able to give touching their origin or use. Not having met with any articles of the same kind before, I was at a loss to recognise their purpose, but, remembering to have seen miniature figures in the form of male and female puppets, and brass statuettes, representing ancestors, and worshipped as household gods by the mountaineers of the western range of hills, I thought these might have some connection with the same practice. I was, therefore, led to make some inquiry in the same direction, and found that the subject embraced a much larger field than I had anticipated.

The belief that after death the disembodied spirit continues to take a deep interest in mundane affairs, and particularly in those of its late relatives, both for good and evil, is very generally held, not only on the west coast, where I first met with it, but prevails over all India, and even far beyond it, especially among the hill tribes of Turanian origin. Figures like those of the masks, or images of chiefs or benefactors, are preserved as *manes*, as are also those of relatives or beloved members of the family. The masks are fitted to the idol or statue of the former, where such exist, or are worn by some person dressed up for the occasion, to represent the individual in question on anniversaries or days of cere-

¹ Kanajor is situated 17 or 18 miles north of Saklespur, in the taluk of Mudigiri, recently separated from that of Manjarábád. The plantation is on the south bank of the Hemávati river, a few miles west of Kasbah Manjarábád, and 120 miles west of Bangalore.

mony. The spirits of men who have exercised an evil influence, or have experienced injurious treatment from others during their lives, are believed to be still actuated by malevolent impulses and revengeful motives, which must be propitiated by sacrifice or offerings to avert disease, misfortune, or other evil influence supposed to emanate from the demon. The effigies of the former are of a gentle and pleasing character, while those of the latter are distorted and frightful, with glaring eyes, protruding teeth, and garnished with attributes of terrible import. The prevalence of this latter belief, and the performance of rites to neutralise its supposed exercise, have been largely described by our missionaries, under the name of devil-worship, or—as the late Bishop of Calcutta (the Right Rev. Daniel Wilson) more appropriately expressed it, in an article contributed to the *Calcutta Review* about 1855, after his visitation to Tinnevely—demonolatry :—

The religion of many of the lower classes [he observes] before Christian preachers came among them was devil-worship. This is a proof of their pre-Brahmanical origin, for their superstitions are identical with the Shamanism of the ancient Mongol and Tatar tribes, and may be seen not only in India, but among the Ostiaks and other heathens of Siberia. It prevails also in Ceylon, where it is mixed up in strange and impure conjunction with the nobler creed of Buddha Demonolatry is purely a religion of fear; bloody sacrifices are offered to avert the wrath of certain malignant spirits, who take delight in blasting the crops, withholding rain, spreading murrain among cattle, and visiting men with sunstroke and epilepsy. They have no temples, but are honoured by the erection of white-washed pyramids, generally of mud, or of thatched sheds open in front, and decorated with hideous figures of bull-headed monsters, or hags devouring children. Such a structure was called a *péy kovil*, or devil's house, and round one of them the demonolaters may be seen from time gathering for a devil-dance, the most important feature, says Dr Caldwell, of their worship These demonolaters, it should be observed, are supposed to be the spirits of dead persons who, in life, were conspicuous either for their crimes or their misfortunes. It is well known that in one place the spirit of an English officer, who had been the terror of the district, was supposed to be the presiding fiend, and was propitiated at a *péy kovil* with offerings of cigars and ardent spirits.¹

But this explanation of the term demon refers only to a portion of the

¹ *Calcutta Review*, No. lxxviii. vol. xxxix. pp. 242-43.

cult, which embraces the great and good among the ancestors of the tribe, and also the former beloved members of the family, whose memory is still cherished, to include whom a more comprehensive term, viz., daimonolatriy, might with propriety be employed, inasmuch as devil worship and demonolatriy, under the present received meaning of the word demon, apply more directly to the worship of evil spirits. It is to the latter class—viz., the beneficent—that the bronzes now under consideration appear to belong, for they have none of the fearful characteristics of the malignant demons, but the very reverse. They are in excellent preservation, and represent two faces or masks of bronze—one a male, the other a female. The features are pleasing and well-formed; those of the man (fig. 1) sharper than those of the woman, which are softer and fuller; in neither of them any trace of the Mongolian or Tatar physiognomy. Above the forehead of the male is a circle of snakes, confined by a twisted band or fillet; above the nose is a perpendicular sectarial mark, broad above, and becoming narrower towards the nose; four necklaces hang round the throat. Round the head of the female (fig. 2) is a chaplet, confined by a twisted band; in both, the hair appears to be dressed upwards. A lozenge-shaped sectarial mark occupies the space between the eyebrows, the left nostril is pierced for a nose-ring, and her neck is adorned with three necklaces. The eyes are not represented, their places being left smooth as in modern sculpture. The cartilage of the ears has been perforated above and below for ear-rings; but the most remarkable feature is that of a curved and pointed object protruding from each angle of the mouth, larger in the male, the meaning of which I was at first unable to understand, but which I now believe, from a comparison with other similar objects, represent tusks. This conclusion is confirmed by the opinion of the learned author of *Native Life in Travancore*, who identifies them with the similar adjuncts common in malicious demons, called *vīra pal*. This explanation of the masks agrees with a subsequent letter from Mr R. C. Sanderson, who states “that it was the custom in that part of the country for heads of villages and persons of distinction to keep these masks as household gods, and once a year to carry them in procession to a festival, in



Fig. 1. Bronze Mask dug up at Kanajor, Maisur, India (11 inches in length).



Fig. 2. Bronze Mask dug up at Kanajor, Maisur, India (10 inches in length).

honour of the principal god of the tribe; and even now it is customary for every one in the district to visit the god yearly with offerings of coconuts," &c. It is not easy to assign to them a probable date. Sectarial marks did not come into use before the ninth or tenth century, when the rival Saiva and Vaishnava sects arose—the former adopting the horizontal, the latter the perpendicular, signs on the forehead. This would lead us to look upon the owners of the masks as connected with the Vaishnava sectarians, notwithstanding the snake-like head-dress; but if they belong, as is most probable, to one of the hill tribes, they would be free from the influence of Hindu habits and prepossessions, and the marks must then be regarded as simply ornamental additions. Moreover, in the whole of Malabar, attributes of Siva and Vishnu, as I was lately informed by Dr Gundert, are not very carefully kept distinct. The correct design and elegant execution of the faces, as well as the metal employed, points to a somewhat earlier period, when Jaina art was in the ascendant, and when bronze was more frequently used than at present.¹

The forms in which such domestic memorials are perpetuated vary considerably. One of frequent occurrence is connected with the marriage of a second or third wife, when it is considered desirable to secure the favour or disarm the jealousy of her predecessor. This is sometimes done by means of a metallic face or mask, an example of which came into the possession of a friend in Bombay, to whom it was sold by the widower after the death of his second helpmate, because, he said, he had no further use for it. Another form is that of a small gold or silver plate, from 1 to 2 inches long, called a *ṭāḥ*, on which a female figure, generally with the hands joined, has been embossed in repoussé work. This is placed on the seat of honour during the marriage ceremony, and afterwards attached to the necklace of the bride by her husband. The

¹ The masks have been submitted to Mr W. Ivison Macadam, F.C.S., Lecturer on Chemistry and Analytical Chemist, Surgeons' Hall, who has reported to Dr Anderson that they are both of bronze, their composition being as follows:—

No. 1. Copper, . . .	86·262 per cent.	No. 2. Copper, . . .	85·467
Tin, . . .	13·632 „	Tin, . . .	14·411
	<hr/>		<hr/>
	99·894		99·878

occurrence of sickness or misfortune to herself or her husband is attributed to the displeasure of the spirit, and the *tūk* is taken off and placed among the household gods, or an exorcist is consulted. Similar *tūks* are suspended to the necks of children to preserve them from the evil eye or the malign influence of the late wife. Four smaller gold plates of like design, which have lately come under my notice from Travancore, have no means of attachment, and are probably therefore examples of the domestic *lares* kept secluded for family worship. Others are in the form of small brass figures, 3 or 4 inches high, two specimens of which, lent from the Church Missionary Society's Museum, had the following labels attached to them:—"Ancestral (female) image, worshipped by some Pulayans,¹ who embraced Christianity in 1881, and were baptized (24 of them) in 1883, near Cottayam." The other "Talanani—a sorcerer, who was devil priest among the Hill Arryans² during his life, and propitiated as a demon

¹ The Pulayans are a low and servile caste in Malabar, in which the husband lives with his wife though she may belong to a different master, and the children inherit any rights the mother may possess.—Wils. *Gloss.*, p. 426.

² The Hill Arryans are one of the most remarkable aboriginal races of the Travancore hills, of whom an account has been published by the Rev. Henry Baker, jun. (London: Wertheim, Macintosh, & Hunt, 1862). It is so interesting as to justify a longer extract. "Demon and hero-worship," he observes, "peculiar rites connected with births, funerals, and husbandry, are practised among them. Remains of cromlechs, funeral mounds, circular enclosures and other monuments precisely resembling each other, are found among them" (as well as among the hill tribes generally) "along most of the mountain ranges in India and Burmah northward. . . . They differ from the Hindus, inasmuch as they do not *idolise evil*, but worship the spirits of their ancestors or certain local demons supposed to reside in rocks or peaks, and having influence only over particular villages or families. The religious services rendered to these are intended to deprecate anger rather than to seek benefits. . . . It is very observable that these people are generally more truthful and moral in their habits than the people of the plains. They are free and intelligent in their manners, and great hunters of wild beasts. . . . Though they are regarded as inferiors by their Hindu neighbours, they are looked upon as beings in alliance with some powerful demonolatry, and presents are abundantly bestowed to prevent their curses producing evil effects. . . . They bury their dead, consequently there are many ancient tumuli in these hills, evidently graves of chiefs, showing just the same fragments of pottery, metal figures, weapons, &c., as are found in other similar places. These tumuli are often surrounded with long splintered pieces of granite, 8 to 12 or 15 feet long, set up on end with sacrificial

after his death. His last heathen successor and heir handed the image to me, and applied for baptism in 1881."—(*Signed*) W. J. RICHARDS. Among the lower castes similar practices prevail, varying somewhat, but all tending to the same belief. According to Mr Mateer, "the Puiliyars (a low outcast tribe, *Wils. Gloss.*, p. 427) offer worship to the spirits of deceased relatives. They are afraid to give any offence to such spirits, which are supposed to haunt the house and neighbourhood, to be pleased with offerings of food, &c., and to inflict disease or death if displeased. No images are made of these *chavukal*, as they are called. The Vedars, a similar low caste, believe that on the third day after decease the soul becomes a *chavu*. Their priest pretends to be able to see it. If it has appeared they are in fear of attack by it. To please these spirits, dancing is practised and fowls are sacrificed. The Pariahs call the souls of ancestors *maruthá* (from *mar*, to die), and these are worshipped by dancing and sacrifice of cocks."

The above remarks relate principally to inquiries made in Malabar, but similar observances have been found among the aboriginal population in other parts of India. Thus among the Santáls and the inhabitants of the Rajmahal Hills, Dr Hunter observes:—"The worship of the Santáls is based upon the family. Each household has its own deity (*orabonga*), which it adores with unknown rites, and scrupulously conceals from strangers. . . . In addition to the family god, each household worships the spirits of its ancestors. . . . The Santál religion, in fact, seems to consist of a mythology constructed upon the family altars and other remains, evidently centuries old. Numerous vaults (or rather *kistvaens*) too are seen in all their hills, like Kit's Coty house in Kent, and the Thevegenny stones in Cornwall. They stand north and south, the circular opening being to the south; a red stone is fitted to this aperture, with another acting as a long lever to prevent its falling out; the sides, as also the stones of the top and bottom, are single slabs. To this day the Arryans make similar little cells of pieces of stone, the whole forming a box a few inches square, and on the death of a member of any family, as the body is being buried, the spirit is supposed to pass into a brass or silver image which is shut into this vault. If the parties are very poor, an oblong smooth stone suffices. A few offerings of milk, ghee, &c., are made, a torch lighted and extinguished, the covering stone placed on, and all leave. On the anniversary, similar offerings being made, the stone is lifted off and again hastily closed. The spirit is thus supposed to be enclosed; no one ventures to touch the cell at any other times."

basis.”¹ Mr Storrs, a missionary who has laboured for many years among them, referring to their “ancestral worship,” writes :—“Indeed I think this is always what they most cling to, and for which they most earnestly plead. The *mánjhi thán*,² so conspicuous in every village street, marking out the house of the head-man, the little thatched roof on its slight wooden pillars, with its round topped stone, with two little wooden doll-like heads projecting out of the ground, this is the place dedicated especially to the worship of the forefathers of the village *mánjhi*, though the two little heads are said to represent more especially the first man and woman In addition to this they have their *laves* and *penates*, the names of which are kept secret from generation to generation, the father never telling the son till he is well advanced in age.”

Colonel Dalton, in his *Ethnology of Bengal*, p. 188, in the account of the religion of the Hos and Mundas of Singbhum and Chota Nagpur, after stating the principal objects of adoration, viz., the sun, moon, woods, springs, &c., continues :—“The remaining spirits are the ancestral shades, who are supposed to hover about, doing good or evil to their descendants. They are often denounced as the cause of calamitous visitation, and propitiatory offerings are made to them. Besides this, a small portion of the food prepared in every house is daily set apart for them. The ancestors are the *penates*, and are called ‘*Ham ho*.’ The ancestors of the wife have also to be considered; they are called ‘*Horalan ho*,’ because sacrifices to them are always offered on the path, ‘*Hora*,’ by which the old woman came as a bride to the house.”

From what has been said, it will be seen that this tendency to continue an intercourse with the departed is founded on the difficulty of accepting the conditions consequent on a sudden separation of continued association, which leads the survivors to deprecate the displeasure of those whom they may have offended or disliked during life, or to express the continuance of that love and affection which had formerly bound them together.

¹ *Annals of Rural Bengal*, pp. 182-4.

² *Mánjhi* or *múji*, among the Rájmahal mountaineers, a title borne by their head men, also termed *mánhá*.—Wils. *Gloss.*, p. 329.

A curious instance of the latter is afforded by an incident related of the first governor of Bengal and the founder of the city of Calcutta. Mr Job Charnock, of whose eccentricities many stories remain on record, having saved a Hindu widow from burning herself with her deceased husband, subsequently married her. She died before him, and ever afterwards he celebrated the anniversary of her death by sacrificing a cock to the goddess Durgá over her tomb.¹ This may have arisen out of Mr Charnock's familiarity with the ideas and habits of the natives, and his desire to conciliate them by conforming to their ways.

The above remarks refer to a small portion only of daimonolatri, without touching on the much larger subject of hero-worship, and founders of tribes, and men conspicuous for great and noble qualities. The religion of the Santáls, according to Mr Storrs, is partly of this description, "the objects of which are five or six brothers and two supposed sisters, evidently some men of old, men of renown, who once took the lead among them, and were afterwards deified." In recent times the Marathas pay divine honours to Sivaji, the founder of their later empire, whose image at Malwan is adorned with a silver mask, which is exchanged for one of gold on anniversaries and festivals. Such an expedient for the occasional worship of the common deities among the lower orders appears to have led to the employment of mask representations, to supply the absence of more elaborate idols, an example of which was given at the meeting, where it was stated that such was the practice very generally observed in the worship of Káli, or as she is called by the Tamils, Pidart, among the lower orders of Hindus. Káli, the wife of Siva the destroyer, is especially an object of fear from her malignant disposition. She is worshipped under various names, as Durgá, Bhairaví, Chandi Chandiká, &c., with a host of local appellations connected with special traditions. From her are supposed to proceed the most terrible calamities and epidemics, as small-pox, cholera, &c. She is therefore propitiated by bloody sacrifices, holocausts of sheep, buffaloes, and other animals being immolated at her shrines. On such occasions she is represented either by her image or in default by facial representations in brass or terra cotta.

¹ Talboys Wheeler's *Short Hist. of India*, p. 199.

[Mr James Burgess, LL.D., &c., Archæological Surveyor for Western and Southern India, and editor of the *Indian Antiquary*, who was present at the meeting, has since communicated the following remarks to that journal, with the view of eliciting information respecting the use of such masks and surviving traces of ancestor-worship :—

The backs of the masks are open, so as to allow them to be attached to wooden, metal, or stone figures, representing the bodies of the personages intended. Both faces are characterised by the tusks usually assigned to images of Bhairava and Kâlt, protruding from the wicks of the mouths, and both have on the foreheads the third eye,¹ placed vertically, which gives to Siva the name of Trilôchana, and which is generally borne by all the forms of that Dêva, and by his *gana* or demon troop of followers. The seven Nâga or cobra hoods on the garland over the brow of each, their intertwined bodies forming the band which unites them into a sort of fillet, and their tails coiled up in little flat curls are also characteristic marks of the Saiva class of images. In the smaller face these cobra hoods have a resemblance to leaves, but this is not unfrequently the case, even in separate images of snakes. The smaller mask has also a hole in the left cartilage of the nose as if for a ring. The other has been supposed to represent a male head, but the distinction is not marked.

Such masks for images of gods, made of bronze, silver, or gold, are quite common in the south of India, and are also in use in the Marâthâ country and in the north; but these are usually lighter and less imposing than the present pair.

They have probably been buried for a century, and may be considerably older; the large ear-rings and the forms of the necklets, however, are such as are still to be met with among certain castes in Southern India to the present time. It has been suggested by Sir Walter Elliot that they may be connected with or allied to images employed in the ancestor-worship, which he believes has not quite disappeared from among the Dravidan races. The worship of the *durdêvatâs*, Kâlt, and Bhairava is closely connected with that of *bhûts*, or the ghosts of dead persons of notoriety.

¹ [This feature in the woodcut is somewhat indistinct, but in the mask itself I cannot see the least resemblance to an eye.—W. E.],

In the present case the masks appear to represent Kālī or Pidāri, as she is called in Tamil, who, being a *durdēvatā*, or evil goddess, is represented with tusks. The large rings in the ears and the necklaces mark the figures as those of females, and Mr S. M. Nātēsā Sāstrī informs me that masks of this goddess are made of clay, and burnt red, to sell to people of the lower castes who worship her at certain seasons; but these are, of course, of a much coarser type than the bronze ones.]

III.

NOTES ON "ANE INFORMATIONE," DRAWN UP BY SIR JOHN DALRYMPLE, FIRST EARL OF STAIR. BY GEORGE LORIMER, F.S.A. Scot.

The document, which, on behalf of the West Church Kirk-Session, I have now the pleasure of handing to the Society, is one of a series of papers, all referring to the same subject, which were lately discovered by me in the examination of a mass of receipts and other written matter belonging to the church, which has been slowly accumulating during the last two centuries.

I have identified it as a paper, the original of which was drawn by Lord Advocate Dalrymple, afterwards first Earl of Stair, and infamous for all time coming as one of the principal authors of the Massacre of Glencoe. There is, I think, no room for doubt in the matter, owing to the existence in the same bundle of papers of a statement of law expenses incurred by the Kirk Treasurer, Mr James Elies, in which it is specially mentioned.

Referring to it, I find the following entries :—

"Given to Sir John Dalrymple to draw ane informatione, 14. 10. 00."

"For writing 14 doubles of the informatione, . . . 4. 04. 00."

The title "Informatione for Mr James Elies of Stanhope-milnes and ye Poore of ye Paroch of ye Weste Kirk against Sir Patrick and Harie Nisbet," corresponds with the entry in the account, while that of none of the other papers would do so. The account, I may mention, refers solely to the expenses incurred in the action in question, so that it is

practically impossible to err; but to make the matter still more certain, it so happens that no fewer than four out of the fourteen doubles, each more or less in a perfect state, have come down to us, while, of the other papers, in no case has more than one copy been found.

I have already mentioned the fees paid, and I may mention, in passing, that their amount, as well as those of other items in the account, would seem to show that, at the time, at least in matters legal, fees were calculated neither in pounds nor merks, but in dollars,—either in rix dollars, the equivalent of which, in Scots money at the time, was £2, 18s., or in leg dollars, which were worth two shillings less. Thus Sir John Dalrymple's fee is exactly five rix dollars, that paid for copying the fourteen doubles being a leg dollar and a half.

Here, perhaps, I should stop, as the "Informatione" itself, however interesting as a specimen of the style of written pleadings then in vogue, would, I fear, be found rather tedious if read *in extenso*. The matter to which it refers has, however, at least in regard to its sequel, an interest of its own quite apart from matters antiquarian, and I believe that a brief outline will not be found unacceptable.

Sir Patrick Nisbet of Dean, the defendant in the action, was a cousin of the well-known legal luminary Sir John Nisbet of Dirleton, and was descended from Henry Nisbet, who was Lord Provost of Edinburgh in the reign of James VI. He figures frequently, seldom in a creditable manner, in the West Kirk records during the last twenty years of the seventeenth century, and from these, and contemporaneous notices of him elsewhere, it seems clear that he was a man of very indifferent character. Thus in 1677, Fountainhall records that he was accused of perjury. Through the good offices of a friend, the proofs were made away with prior to trial; but his case was at the outset considered so desperate that his cousin, who was Lord Advocate at the time, privately advised him to give his accuser, Hepburn of Humble, 4000 merks, in order to get a discharge of the process.

The dispute between Sir Patrick Nisbet and the West Kirk Session arose in this way. For seven years previous to 1680, the funds belonging to the West Kirk poor had been intrusted to the care of one Alexander Shed, a maltster in the Water of Leith. During the whole of

this period no account was rendered by him of his intrusions, though latterly it became notorious that he was heavily embarrassed, and a majority of the Kirk-Session were clamant for the appointment of a new treasurer. This was strenuously opposed by Sir Patrick Nisbet, who, supported by Mr Gordon, one of the ministers, and several of the Kirk-Session, who like Shed, were mere creatures of his own, and quite subservient to his authority, remained master of the situation, until the interference of the Bishop of Edinburgh had been sought and obtained by his opponents.

At the time Shed was heavily indebted to Sir Patrick, Sir Patrick in turn being due the West Kirk poor the sum of 2000 merks, and the reason of the latter's long objection to the production of Shed's accounts seems to have been the difficulty which he found in persuading him to agree to a scheme which he proposed for the purpose of recovering his own debt at the expense of the poor. This was ultimately carried out, and Shed, as kirk treasurer, gave Nisbet a discharge of his bond for 2000 merks, receiving presumably from him an equivalent discharge *pro tanto* of the amount due by him to Nisbet. He also, in respect of his other indebtedness, granted to Nisbet a bond over his property in Water of Leith for 4600 Lbs. Scots, whereby Sir Patrick was infest as vassal to Shed, though he himself was Shed's superior. This heritable bond was transferred to his son, Harry Nisbet. Before this could be fully carried out, however, Shed had been compelled to produce his long-delayed statement of accounts, and these showed that he was a defaulter to the extent of no less than 2500 merks, for which sum he gave a bond over the same property. In addition to these, it was discovered, on his death, which occurred shortly after, that he had granted several other obligations, and a great amount of litigation ensued, the different bondholders competing for preference.

Mr James Elies of Stenhope Mills, who succeeded Shed in the office of treasurer, lost no time in seeking to undo the evil work of his predecessor, and at once raised two different actions—the first against the Rev. Mr Gordon, Shed, and Sir Patrick Nisbet, in which he sought to obtain a reduction of the discharge of Sir Patrick's debt to the poor, which Shed, acting, it was said, in collusion with the others, had

granted; the second for the purpose of proving that the bond granted by Shed over his estate in favour of the poor should rank prior to that granted to him about the same time to Sir Patrick.

The former of these actions was soon settled in favour of the Session, and on the 22nd February 1681, Sir Patrick gave his bond for the full amount, and thirteen years later cleared it off with all arrears of interest. The discharge then granted him was a very full one, and purported to be for "the haill soumes due be him to the Kirke Session." The second action proved a much more tedious affair. Sir John Dalrymple, on behalf of the poor, as we learn from the "Informatione," took up the position that Sir Patrick Nisbet, by the very fact of his being a member of Session, and thereby a guardian of the interests of the poor, was precluded from doing anything in the way of preferring his own interest to their detriment, and, in addition, not merely brought out the fact that in the execution of the corroborative bonds which followed upon the first, had there been several serious irregularities, but even alleged that the deeds in question had been ante-dated, and were therefore fraudulent. The case was again and again before the Court until, on the 18th February 1682, it decided that, though right in point of law, Sir Patrick had used indiscreet means for getting himself preferred to the poor of the West Kirk, and therefore ordained that the poor should come in equally with him, and the maills and duties be divided equally betwixt them.

In this position the matter rested until 1687, when Sir Patrick, on what grounds I have not been able to discover, raised an action of reduction against the claims of the West Kirk poor upon Shed's lands. No papers in connection with this third action have come down to us, and no reference is made to it by Fountainhall; but I think there is very little doubt but that it was successful, and to all appearance the matter was finally settled—was indeed, so far as the actual possession of the land. It remained in the Nisbet's possession, and in the valuation roll of 1726, Patrick Nisbet, jun., is entered as proprietor of "Alexander Shed's lands" in Water of Leith, rated @ 110 Lbs. Scots.

From the pages of the West Kirk records it is easily seen that Sir Patrick Nisbet was not merely in his own opinion, but was in reality, a

man of very great importance in the West Kirk parish. On one occasion we find him gratuitously assuring the Session that he had no objections to their censuring a disorderly person thought to be under his protection ; and so surprised and annoyed was he by the vigorous action taken by Mr Elies against him, that in the middle of the litigation he actually stopped him on the public highway and threatened to nail his lugs to the Tron. Times were changed after the Revolution, for the sturdy Presbyterian ministers who succeeded to the charge of the West Church were men of a different stamp from Mr Gordon ; but still Sir Patrick, as the largest heritor in the parish, was a man of consequence, and some years thereafter, when one of the church members was rebuked for permitting him and another to drink in his premises during divine service, not a word is mentioned as to there being any censure meted out to the principal offender himself.

Unfortunately, Sir Patrick got into a much more serious scrape than this not long after, in the autumn of 1695. By this time he must have been a pretty old man ; thirteen years previously, his son's first child was born, and giving due weight to that fact, it is rather startling to find that he was now accused apparently on very strong evidence of having been guilty of a very grave indiscretion of conduct. Into the details of the matter, it is unnecessary for me to go, but I may mention, that the party, whose name was associated with his own in the matter, was no other than the wife of the church beadle. The scandal was of course tremendous, and the promised spectacle of the principal heritor in the parish sitting in the place of public repentance, in such company, must have been eagerly looked forward to, and in anticipation enjoyed by every Mrs Grundy for miles around.

A business of such importance could, however, only be discussed in a very full meeting of Session, and it proved so very difficult to get a full meeting, that at last the case was remitted to the Presbytery of Edinburgh. Whether it was ever adjudicated upon or not, it is impossible to discover, the minute books of the Presbytery, for the time, being no longer in existence. One thing is certain, that the case is never again referred to in the records of the West Kirk. The edifying spectacle of

Sir Patrick's public repentance was destined not to be, but it must not be too hastily inferred therefrom that he escaped scot free. Alexander Shed had been dead for nigh twenty years, Sir Patrick in undisputed possession of his land for nearly half that time, while his own old debt to the Session had been finally paid but a twelvemonth ago, and a discharge, as before mentioned, then granted to him for "the hail soumes due be him to the Kirke Session." How was it then that he, just at this time, comes forward and—spontaneously admitting a liability the existence of which he had previously denied, which the Court had refused to recognise, and which, by their long silence on the subject and their recent discharge, the Session no longer insisted on—proposed to refer to arbitration, whether or not he was bound to make good the 2500 merks, due by Shed to the poor, the bond for which, by the interposition of his private claim, he had rendered worthless. This was what he did, however.

The matter was, by his consent, referred to Sir John Foulis and another, and by them decided that Sir Patrick should repay the whole sum. No easy task it was, but, at last it was accomplished, the final instalment being only paid in 1703. It is hardly possible to avoid the conclusion that this large sum of money was neither more nor less than smart money, a fine paid by the mighty laird of Dean in preference to undergoing the indignity of sitting in the place of public repentance along with the beadle's wife, and so in a most unlooked-for-way the "West Kirke poore" had their own again.

IV.

NOTICE OF A SMALL CEMETERY OF THE BRONZE AGE, RECENTLY
DISCOVERED AT SHANWELL, MILNATHORT, KINROSS-SHIRE. BY
JOSEPH ANDERSON, LL.D., ASSISTANT SECRETARY.

By the courtesy of Mrs Coventry of Shanwell and Miss M. J. Coventry, who have taken much interest in the discovery of a series of prehistoric interments excavated in the course of improvements which were being made in the neighbourhood of Shanwell House, I am enabled to place on record some of the circumstances and characteristics of what seems to have been a small cremation cemetery of the Age of Bronze.

As is usual in most cases of similar discoveries, the site of the cemetery was a natural ridge or hillock of no great altitude, and the burials were brought to light in consequence of the excavation of the mound for gravel. During the progress of this operation, deposits of burnt bones were met with from time to time at no great depth from the surface, and chiefly towards the central portion of the eminence. In the case of several of these deposits no fragments of urns were detected in association with the cremated bones, but in at least four cases urns of the usual cinerary form were present. They appear to have been simply set in the soil, and covered over without any protecting cist. The most interesting circumstance in connection with this cemetery, however, was the discovery, in connection with one of the deposits, of one of those thin oval bronze blades with incised ornamentation, which seem to be more characteristic accompaniments of Bronze Age interments in Scotland than any other implements, the thin flat triangular dagger blades perhaps excepted. This blade (of which a view of both sides and a section across the middle of its length are shown in fig. 1) is $3\frac{1}{2}$ inches in length, and may have been slightly longer, as the extreme tenuity and fragility of the edge have caused it to give way all round, and especially towards the point. The middle portion of the blade is ornamented on both sides with a diamond-shaped pattern of incised lines enclosed within a double border, consisting of a

band of oblique lines, and a smaller band with a row of punctulations running down each side. On the one side of the blade the diamond-shaped pattern is filled with cross-hatching, and the triangular spaces on either side are left blank. On the other side the diamond-shaped spaces running down the centre of the pattern are blank, and the triangular



Fig. 1. Oval Bronze Blade, found with Burnt Bones at Shanwell
(actual size).

spaces on either side are filled with cross-hatching. In this case it is observable that the positions of the two bands which compose the border are different from their positions on the other side, the open band, with a single row of punctulations, being placed inside the band

filled with oblique lines, and thus preventing it from coming against the similarly filled triangular spaces on either side of the lozenge-shaped pattern. The reversal of this on the opposite side of the blade fits the case there in a similar manner by preventing the open band from coming against the open triangular spaces. The decorator evidently knew what he was about. The blade has been hafted in a handle of bone, horn, or wood, all traces of which have disappeared, but the broad flat tang shows a single rivet-hole. This is the only example yet known (in Scotland at least) of this variety of oval blade furnished with a broad flat tang pierced for an attaching rivet. The blade of



Fig. 2. Urn found at Shanwell (9 inches in height).

similar type found in a Bronze Age cemetery of the same description at Magdalene Bridge, near Joppa, was broken off by the rivet hole, and merely showed an indication of its existence. Most of the others that are known were furnished with spike-shaped tangs.

Two of the urns from the Shanwell Cemetery are sufficiently entire to show the form and ornamentation. They are both of the usual cinerary form, with two slightly raised mouldings round the widest part, and tapering below in a flower-pot shape. The smaller of the two (fig. 2) measures 9 inches in height and $8\frac{1}{2}$ inches diameter across the mouth. The upper part between the first moulding and the brim is orna-

mented with a series of scorings crossing each other obliquely, and a band of similar scorings surrounds the interior of the brim. This urn and the bronze blade are preserved at Shanwell House.

The larger of the two urns (fig. 3), which has been presented to the Museum by Mrs Coventry, measures $12\frac{1}{2}$ inches in height and $11\frac{1}{2}$ inches in diameter across the mouth. As in the case of the other urn, the space between the first moulding and the brim is ornamented with



Fig. 3. Urn found at Shanwell ($12\frac{1}{2}$ inches in height).

a lozenge-shaped pattern, the triangular spaces on either side of it being filled up with lines crossing each other in a direction paralld to the adjoining sides of the lozenge-shaped spaces. These lines are formed of impressions of a twisted cord in the soft clay. The interior of the rim is ornamented with a band of obliquely crossing lines of similar character. The resemblance of the pattern on the exterior of the urn to the lozenge-shaped pattern on one side of the bronze blade is sufficiently obvious.

V.

NOTICE OF ST CLEMENT'S CHURCH AT ROWDILL, HARRIS.

BY ALEXANDER ROSS, ARCHITECT, INVERNESS, F.S.A. SCOT.

The church of St Clement at Rowdill, in Harris (fig. 1), is situated at the south-east angle of the island, on a rising promontory near a land-locked bay at the eastern end of the entrance to the Sound of Harris. The church lies due east and west, and is cruciform in plan (fig. 2), measuring 61 feet in length by 15 feet in breadth, with transepts measuring 9 feet by 17 feet 6 inches, and 10 feet by 15 feet. There is a square tower at the west end, of the full width of the church, and about 45 feet high, capped with a slated roof. The church is founded on a very uneven surface, the tower being on a rock many feet above the level of the nave, but accessible from it by a stair in the wall now closed up. (See the sections, fig. 4.) The modern building is generally of very common material and workmanship, but the more ancient structure seems to have been of better material and more refined construction. Judging by its present appearance, I am inclined to conclude that the original building had become so far ruinous that only the lower portions of the walls of the nave, tower, transept, and east gable remained intact, and that the upper portion of the walls of the nave and tower had been built out of the old materials without much regard to character or design. The windows were built square for wooden sashes, and the upper portion of the tower repaired with fragments of the old moulded corners and rybats and sculptures used promiscuously, as was found convenient, so that several of the sculptured figures have been placed in most unlikely positions, as chance to some extent dictated. The positions of the figures over the door are notable examples of this. One of the figures on the south side of the tower is remarkable on account of its dress (fig. 5). The lower portions of the walls of the nave, the transept arches, and the side and end windows of the chancel are evidently of early date, as are also the tombs recessed into the walls, the arches of which are apparently of contemporary workmanship with the arches of the transepts. The arches both of the

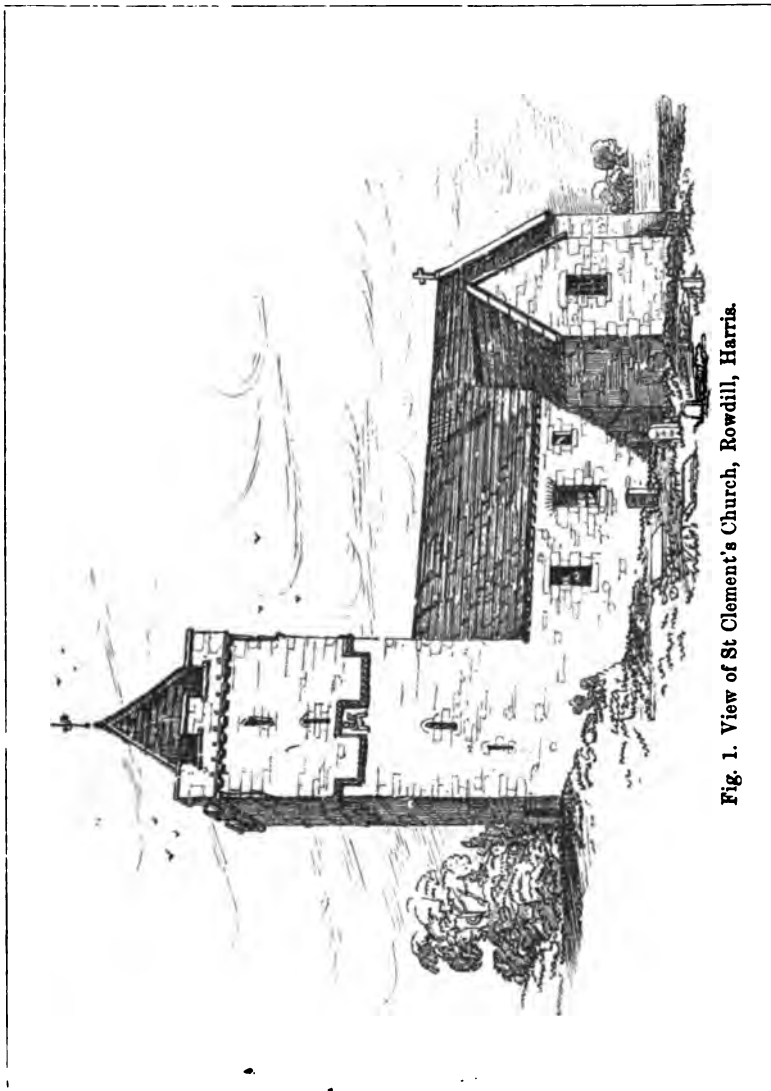


Fig. 1. View of St Clement's Church, Rowdill, Harris.

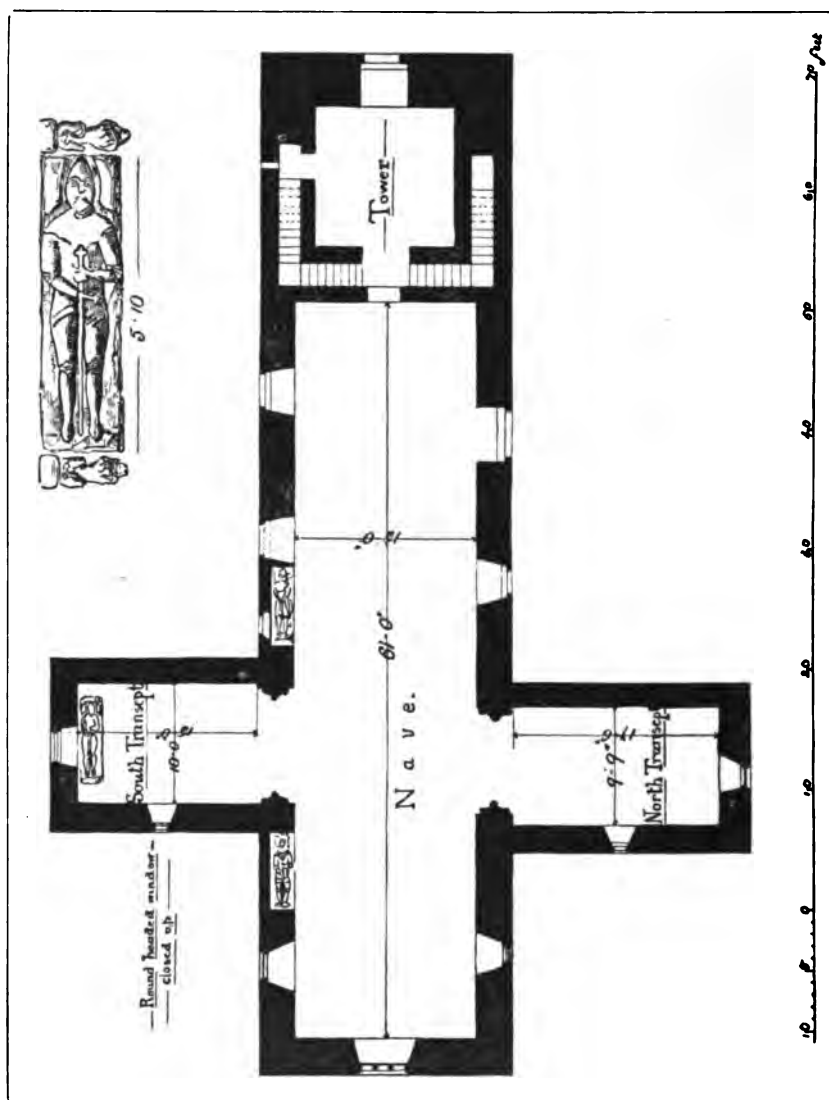


Fig. 2. Ground Plan of St Clement's Church, Rowiill, Harris.

tombs and of the transepts are cast in a pale yellow freestone with alternate bands of hornblende schist, but the filling in of the panels at the back of the tombs appears to suggest possibly a later date or a subsequent adaptation. The impression conveyed by the general character of the work—the mouldings, transept arches, and arches of tombs—is that of the work of an amateur, who having seen good work, was trying to imitate it; for while the forms indicate the class of moulding intended, they fail to give it expression with mathematical accuracy.¹ The east window is cut out of hornblende schist, and is a



Fig. 3. Section through Nave and South Transept of St Clement's Church, Rowdill.

very remarkable piece of work of its kind. It is of three lights, with a circle or wheel over, divided by six straight spokes. The mouldings are decorated with rows of nail-head ornaments, as are also the labels on the windows and tombs. A plain font (fig. 7), or holy-water stoup, it is not easy to say which, lies on the floor of the nave.

The tomb bearing the inscribed panel is situated to the east of the transept, and exhibits the full-length effigy of a knight in armour of

¹ The character of the work appears to indicate an Italian or Spanish school, and probably the designer may have obtained his knowledge in one or other of these countries.

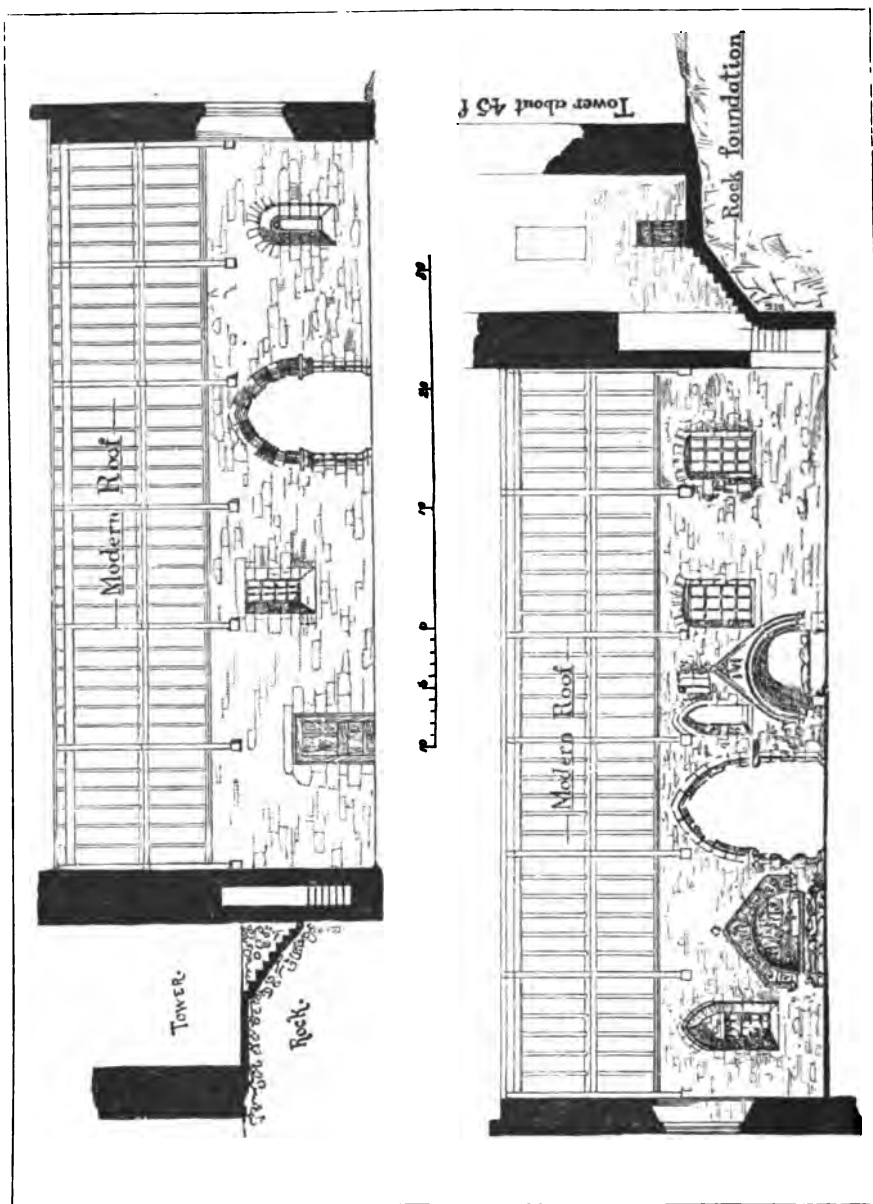


Fig. 4. Longitudinal Sections of St Clement's Church Rowdill, looking north and south.

plate, placed under a recessed arch. The feet of the effigy, which are to the east, rest upon an animal, and over the head is a panel with the following inscription in black letter:—

Hic : locubus : coposbit
. . . : Alexander : filius : bilmī
Mae : Clob : vno : de dubegan
Anno : vni : mo : cccc° : xxiij°

The first word of the second line is partly illegible, and the inscription is so ungrammatical that it cannot be strictly construed, but its meaning appears to be that Alexander, son of William Macleod of Dunvegan, made this tomb, A.D. 1528.

It is somewhat difficult to account for the erection of such an elaborate monument to a Highland chief in the remote Western Isles at that period. But the peculiar character of the monument, with its sculptured panels filling up the back of the recessed arch, is not unknown in the Hebrides. There is a recessed monumental arch, similarly decorated on the back with sculptured panels, in the church of Kildonan, in the island of Eigg,¹ and among the many churches throughout the islands there may have been others of similar character. The effigy of the person commemorated by this elaborately sculptured tomb at Rowdill (figs. 8, 9) is represented in armour of plate corresponding to the period. The conical bassinet is surrounded by a jewelled wreath; the camail short, the military belt confining the lower part of the close-fitting jupon worn over a hauberk with vandyked



Fig. 5. Figure of a Man built into the upper part of the wall of the Tower, Rowdill.

¹ Described and figured by Professor Macpherson of Eigg, in the *Proceedings*, vol. xii. p. 583.

edge, the thigh-pieces curiously hinged, the knee-pieces peaked, and the sollerets short and obtusely pointed. The sword, which is cross-hilted, is held by both hands in front of the figure, the pommel reaching to the breast, and the point of the sword placed between the feet.

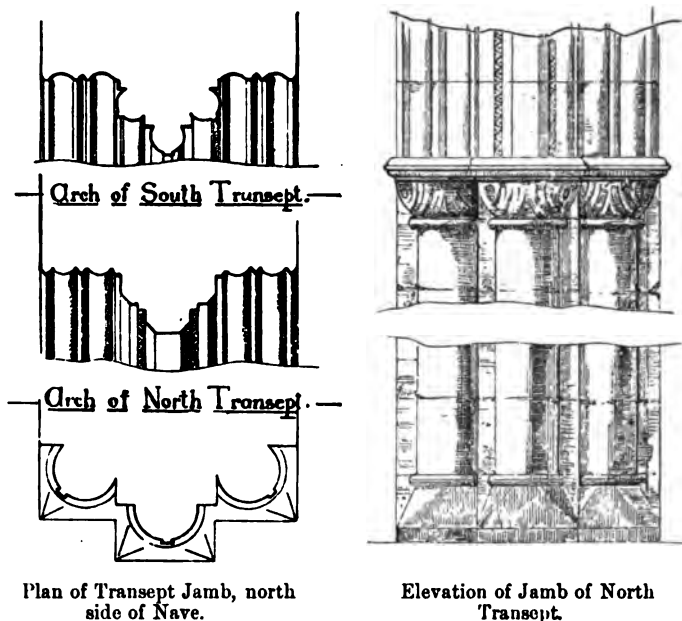


Fig. 6. Details of Arches and Jambs of Transepts.

The decoration of the panels forming the back of the recess is very peculiar (see fig. 10). On the left and over the feet of the effigy there is a hunting scene, in which a huntsman on foot, armed with sword and spear, is followed by two attendants, each with two hounds in leash. In the panel immediately in front, is a group of three stags. The panel adjoining the inscription bears a representation of St Michael weighing souls, the devil sitting by, and evidently taking a practical interest in the

operation. In the second row of panels, beginning again at the left, we have first the representation of a castle, then three panels with canopied niches, of which the centre one represents the Virgin crowned and seated on a throne, and bearing in the right hand a sceptre, while with the left she supports the Holy Child upon her knee; the two panels on either side represent abbots—the one on the left with mitre and crosier, and the right hand raised in the attitude of benediction; the one on the right presenting a skull, as the emblem of mortality, in his right hand, and holding the crosier with his left. The last panel in this row shows a galley in full sail, and the side pierced for seventeen oars, not borne heraldically upon a shield, but represented



Fig. 7. Font or Holy-Water Stoup in St Clement's Church, Rowdill.

pictorially, as if it formed part of the symbolism with which it is surrounded. The three upper panels immediately underneath the crown of the arch contain figures of angels. In the centre panel are two angels face to face blowing trumpets, and on either side a single angel with a censer. The fronts of the voussours of the arch are also decorated with a series of sculptures, the centre-piece over the crown of the arch representing God the Father seated, crowned with a tiara, and holding between the knees the figure of the crucified Saviour nailed to the cross, with angels on either side. Of the eight panels bordering the sides of the arch, one on each side is filled with the figure of an angel holding a censer, and three on each side are filled with pairs of figures holding inscribed scrolls which are now illegible. There are traces of a nimbus surrounding the heads of some of the figures which are best preserved. Sir Walter Scott regarded them as figures of the twelve apostles; but they seem more likely to be merely emblematical.

Of the other two effigies, the one in the nave to the west of the transept (fig. 11) represents a man in armour with high peaked bassinet and camail over a habergeon reaching to the knee. The nature of the defences of the feet and legs is not indicated. He holds a long straight cross-hilted sword in front, the pommel reaching to the breast and the point placed between the feet. A dagger hangs at his left side, but the



Fig. 8. Front View of Effigy under recessed Arch of Tomb to east of Transept.



Fig. 9. Effigy under recessed Arch of Tomb (fig. 10) to east of Transept.

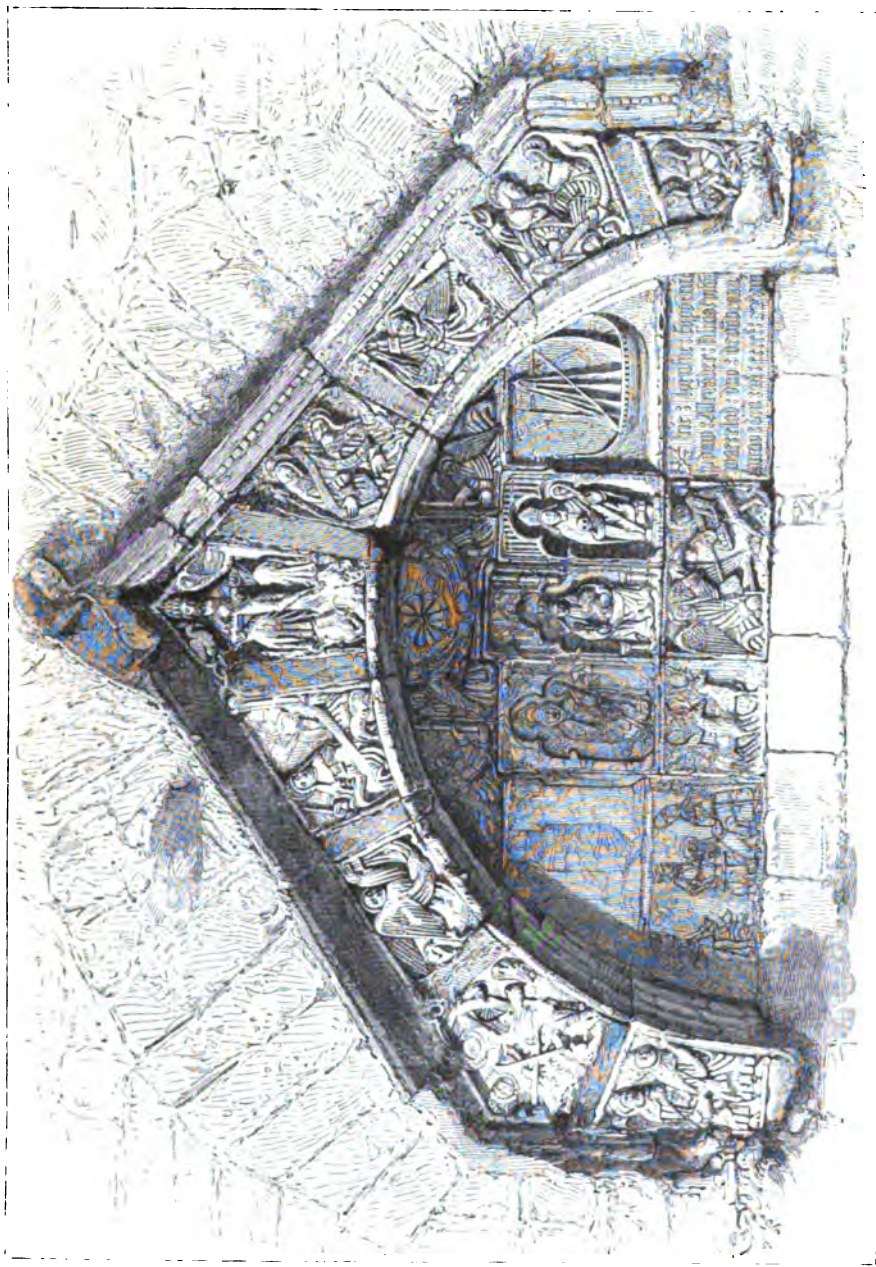


Fig. 10. Recessed Arch over Effigy (fig. 9) to east of Transept, showing sculptured panels and voussoirs.

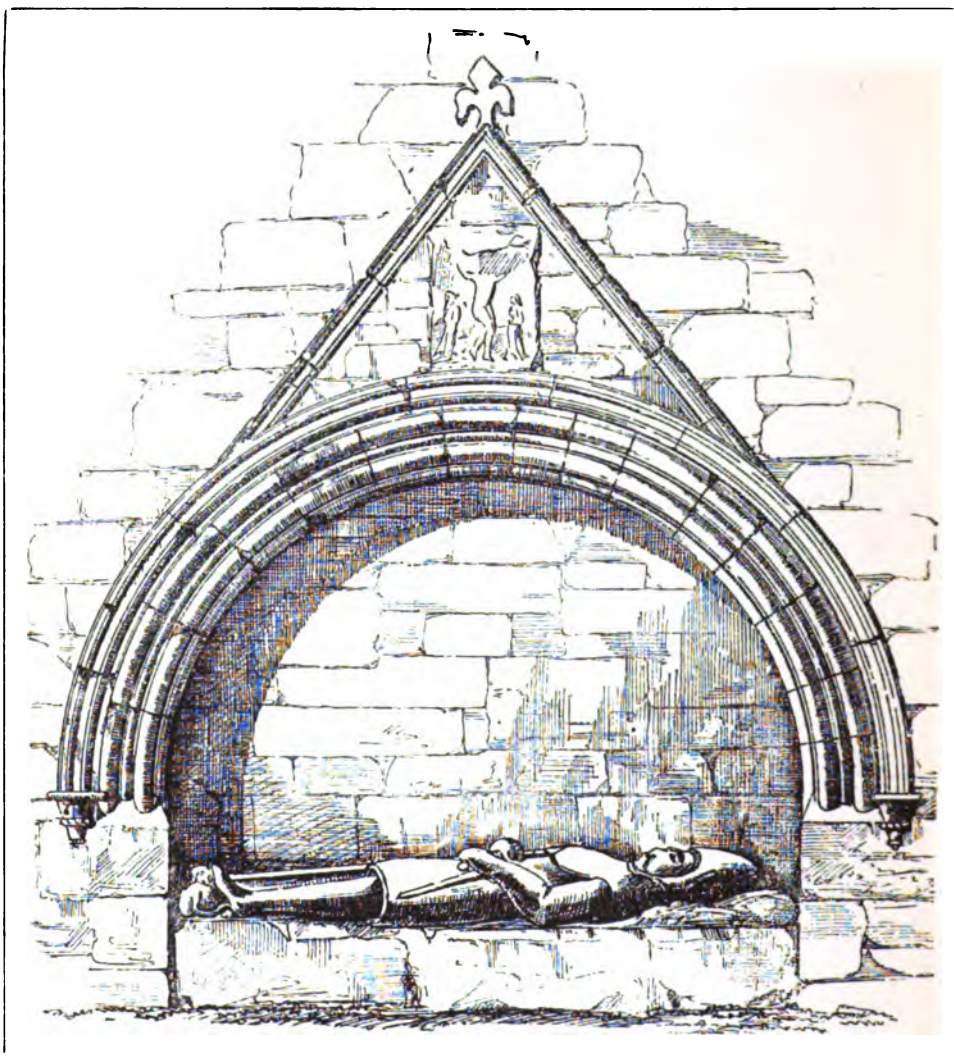


Fig.11. Effigy in recessed Arch to west of Transept.

military belt is wanting. The third effigy, which now lies at the end of the south transept (see fig. 2), is apparently in armour of plate, with low conical bassinet and camail, but the details are much worn, and difficult to make out. He holds the long sword in the same fashion as the other two effigies, with the pommel on the breast and the point between the feet ; but in this case the sword has the reversed guard, so commonly seen on many of the West Highland monuments.

Mr Thomas S. Muir, author of the well-known work on the *Characteristics of Old Church Architecture in Scotland*, who visited Rowdill in 1866, has the following remarks on the architectural features and probable date of the church, in his recently issued work, entitled *Ecclesiological Notes on some of the Islands of Scotland* :—

Excepting some curious sculptures built into the tower, there is nothing in the exterior of the building deserving much notice. Within there are some very interesting features, viz., the peculiarly moulded arches and jambs of the side chapels ; an armed effigy recumbent on a stone coffin in the south chapel ; the upper portion of a small cruciform pillar of the Argyleshire pattern bearing the crucifixion on one of its faces ; and two sepulchral recesses in the south wall of the church, one of them eastward and the other westward of the transeptal chapel. The eastern recess contains a mailed effigy recumbent on a low tomb. Behind, the wall of the recess is composed of twelve sculptured panels, each panel forming a distinct subject in bold relief. The recess westward of the chapel was probably adorned in a similar manner, but now the only sculpture is a crucifix, with the usual figure on either side, placed in the spandrel of the canopy. Respecting the age of the building, it would be venturesome to say anything positively, for besides the uncertainty created by the anomalous character of some of its details, nothing at all satisfactory has been recorded touching the date of its erection. Judging from the shape of most of the windows, and the kind of *tooth* and *nail-head* ornamentation carried under the label moulding and along the spokes and monials of the east end one, somewhere about the thirteenth century might be supposed ; and very likely the greater part of the shell of the building, and the smaller windows in it, belong to that date, though certainly not the chapels, which it is just possible were not comprised in the original plan, for notwithstanding the resemblance to First Pointed, and even in some parts to Romanesque, observable in the arches and jambs, the work is evidently imitations only of these styles, and in all probability not earlier than the fifteenth century. Donald Monro, High Dean of the Isles, says (1594) :—" Within the south pairt of this isle (Harris) lyes ane

monastery with a ne steipell, quhilk was foundit and biggit by M'Cloyd of Harrey, callit Roodill." Who this particular Macleod of Harris was, and at what time he lived, it is impossible to say ; but as in the early part of the sixteenth century a Sir Alexander Macleod was rector of Harris, it is likely that he is the person referred to by the Dean. In the Old Statistical Account the minister of Harris also speaks of, apparently, this Alexander, and of his being the putative founder of Rodill, but asserts that he only repaired the building ; and this I am disposed to believe was all that he did, as, though by no means ancient, it must have been standing long before his time. Not *very* long however, for the whole character of the structure bears the impress of a period late in the practice of ecclesiastical architecture ; and although in the mouldings of the arches, east window, and monumental recesses in the side walls, there are ornamentations peculiar to the twelfth and thirteenth centuries, these an eye at all tutored will readily detect as merely imitations of the primitive types, just as we find such forms to be so in other comparatively modern buildings whose dates of erection are matters of history.

Alexander Macleod of Dunvegan, better known as Alaster Crotach, or Humpbacked, had in 1498 a charter from King James IV. of the lands commonly called Ardmanach, in Herag of the Lewis, which had belonged hereditarily to his father William Macleod, and had been held by him *in capite* of John, the late Lord of the Isles, by reason of whose forfeiture they were then in the king's hands. The *reldendo* of the charter is the ordinary service of ward and relief, together with the attendance of a galley of twenty-six oars and two galleys of sixteen oars when required, the king reserving the eyries or falcons' nests within the said lands. The inscription assigns the erection of the elaborately ornamented tomb to the year 1528, and hence it would appear that it must either have been erected in honour of William Macleod by his son Alexander, or alternatively by Alexander (son of William) in his own lifetime for himself. Alaster Crotach was alive in 1539, for in that year he had a charter of the lands and barony of Glenelg, which Hugh Fraser of Lovat had then resigned. He is mentioned as dead in a document, dated 10th January 1546-7, which conveys to the Earl of Argyre a gift of the ward of the lands which belonged to umquhile Alexander Macleod of Dunvegan. Alaster Crotach was succeeded by his eldest son William, who died without male issue in 1553, leaving an infant daughter Mary, sole heir to the old hereditary possessions of

the Seill Tormod or Macleods of Harris. These possessions included the lands of Harris, Dunvegan, Minganish, Bracadale, Duirinish, Lyne-dale, and Glenelg, but he was also the vassal of the Crown in the lands of Trouterness, Sleat, and North Uist, which made these extensive estates a male fief.¹ The contention which arose over the succession in consequence, and the subsequent fortunes of the heiress Mary Macleod, as one of the four Maries, famous in the Court of Mary Queen of Scots, are matters of history, and need not be further referred to, as we are at present more specially concerned with the history of the fabric itself.

Buchanan states that the church of Rowdill was built by Alexander Macleod of Harris—the Alaster Crotach already mentioned, who first appears in possession of Harris in 1498, and was dead in 1546. The “personage of Roidill in Hereis” appears among “the teinds and personages pertaining to the Bishop,” in the rental of the Bishopric of the Isles and Abbacy of Icolmkill drawn up in 1561. The writer of the notice in the Old Statistical Account states that the church had fallen into a ruinous condition, and was repaired in 1784 by an Alexander Macleod, then of Harris.² After it was roofed and slated, and while the materials for furnishing it were within it, the church caught fire through the carelessness of the carpenters, and the new roof was destroyed. It was again repaired, and though left unfinished in consequence of the death of the zealous proprietor, it continued to be used as one of the preaching stations in the parish. About fifteen years ago it

¹ Alaster Crotach had obtained a charter of the bailiary of these lands 15th June 1498; but a fortnight after, on 28th June, another charter made the same grant to Torquil M'Leod of Lewis. In 1528 Alexander, the laird of Harris, brought an action before the Lords of Council against John MacTorchill M'Leod and others, for dispossessing them of the bailiary of Trouterness and lands annexed to that office.

² The following inscription on a tablet on the west wall of the church commemorates this restoration:—

“Ædes Has sacras + Atavorum suorum pietate + Deo et S. Clementi + olim dicatas + postquam + mutatae religionis furor + omnia undique miscens et vastans + adjuncta fratrum et sororum Cœnobîa + solo æquasset + Ipsisque his muris + jam plus cc. annos nudis et neglectis + vix pepercisset + Restituit et ornavit + et postea igne fortuite haustas + iterum restauravit + Alexander Macleod de Harris + A.D. MDCLXXXVII.”

appears to have again fallen into a very dilapidated condition, and required extensive repairs and roofing. Fortunately it was at that time taken in hand by the present Dowager Countess of Dunmore, who had it re-roofed and secured from the weather, and later on the writer of these notes had the pleasure of having the walls cleaned down and re-pointed, the old carvings and mouldings uncovered and cleared of rubbish, and the church seated with movable benches for service.

MONDAY, 9th March 1885.

SIR W. FETTES DOUGLAS, LL.D., P.R.S.A., Vice-President,
in the Chair.

A Ballot having been taken, the following Gentlemen were duly elected :—

FELLOWS.

KIRKMAN FINLAY of Dunlossit, Islay.
ANDREW HAY, Oriental Club, Hanover Square, London.
DAVID WHITELAW, Mansfield House, Musselburgh.

CORRESPONDING MEMBER.

CHARLES S. TEMPLE, Cloister Seat, Udney, Aberdeenshire.

The following Donations to the Museum and Library were laid on the table, and thanks voted to the Donors :—

(1) By GEORGE ROBERTSON, F.S.A. Scot., Dunfermline.

Whorl of Claystone, $1\frac{1}{4}$ inches diameter, ornamented with two grooves round the circumference, and oblique lines on the upper surface, found in Berwickshire.

Ball of Greenstone, $1\frac{1}{4}$ inches diameter, smoothed on the surface, found in Berwickshire.

(2) By SPENCER G. PERCEVAL, Severn House, Hanbury, Bristol.

Bead of blue glass, one inch in diameter, flattened on both sides, and ornamented with slightly projecting bosses traversed by white spirals,

found on Brighthouse Farm, Logie, near Kilmany, Fifeshire. Beads of this description are not often met with in Scotland. The type most characteristic of the Scottish area is shown in the two examples found at Cawdor, Nairnshire, and here figured along with the Fifeshire specimen for comparison.

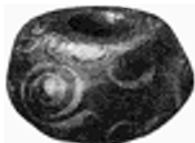


Fig. 1. Bead of Blue Glass, with white spirals, found in Fifeshire.



Figs. 2 and 3. Beads of blue glass, with yellow spirals, found at Cawdor, Nairnshire (actual size).

(3) By GEORGE BRUCE, Sand Lodge, Shetland.
Two Shetland Spinning-Wheels.

(4) By THOMAS CHAPMAN, Auctioneer, 11 Hanover Street.
Rude Old Wooden Chair, from the North-West Highlands.

(5) By ANDREW ROSS, S.S.C., 53 George Street.
Lithograph of the Guidon of the Regiment of Dragoons raised by Henry, Lord Cardross, in 1689.

(6) By R. W. COCHRAN-PATRICK, of Woodside, LL.D., M.P., the Author.
Catalogue of the Medals of Scotland, from the earliest period to the present time. 4to. Edinburgh, 1884.

(7) By the Ayrshire and Wigtownshire Archæological Association, through R. W. COCHRAN-PATRICK, M.P., *Secretary*.
Archæological and Historical Collections of the Ayr and Wigtownshire Association. Vol. iv., 4to. 1884.
Charters of the Royal Burgh of Ayr. Printed for the Ayr and Wigtown Archæological Association. 4to. 1883.

(8) By T. J. CARLYLE, F.S.A. Scot., the Author.

The Scotts of Euisdale. 10 pp. 8vo. Privately printed.

(9) By JAMES ANDERSON, Kirkwall, the Publisher.

Anderson's Guide to the Orkney Islands. 8vo. Kirkwall, 1884.

(10) By Rev. CHARLES ROGERS, D.D., LL.D., F.S.A. Scot., the Author.

Social Life in Scotland. 2 vols. 8vo. Grampian Club, 1884.

(11) By WYATT PAPWORTH, the Author.

The Renaissance and Italian Styles of Architecture in Great Britain. 43 pp. 8vo. 1884.

(12) By J. MARLEY HAY, F.S.A. Scot., the Author.

The Scenery of the Dee, Aberdeen. 4to. 1884.

(13) By ALEXANDER WALKER, F.S.A. Scot., President of Aberdeen Art School, the Author.

Disblair, 1634-1884, or an Old Oak Panel and Something thereon, 1884. Church Relics shown at the Seabury Centenary Exhibition, 1884.

(14) By P. H. M'KERLIE, F.S.A. Scot., the Author.

History of the Lands and their Owners in Galloway. 5 vols. 8vo. Edinburgh, 1870-79.

There were exhibited :—

(1) By Mrs K. MACLELLAN, Melfort, Argyleshire.

Necklace of Beads and Plates of Jet, and Armlet of thin beaten Bronze, found in a cist with an unburnt skeleton at Melfort, Argyleshire. The cist was apparently one of a group, of which two were discovered by the workmen engaged in making some road alterations at Melfort. In one of the cists there was nothing observed but some traces of the bones. In the other cist Mrs Maclellan discovered a

necklace of jet beads and a pair of armlets of thin bronze, which had been deposited with the interment. The necklace resembled those already in the museum, as described in the *Proceedings*, vol. viii. pp. 408, 412, and vol. xii. p. 296, and was nearly equal in completeness to the more elaborate necklace found at Balcalk, which is figured in the *Proceedings*, vol. ii. (New Series) p. 262. The beads and plates were of the usual forms, the plates decorated with punctulated ornamentation, and the small triangular pendant present. The armlets of bronze are more peculiar. One was unfortunately so much damaged as to be incapable of reconstruction, but its fragments showed that it had been precisely similar in pattern, size, and workmanship to the other. The second armlet, which is here figured (fig. 2), though not quite entire,



Fig. 2. Bronze Armlet found with a Necklace of Jet Beads in a Cist at Melfort, Argyleshire (actual size).

at least presents a complete view of half of its surface, and, on the upper side, of the whole of its circumference. It measures $2\frac{3}{4}$ inches in diameter and 2 inches in height. The bronze of which it is composed is extremely thin, the fractured edges showing sections not much thicker than ordinary writing paper. It is finished at the openings with a

slightly thickened and rounded edging, and decorated on the exterior surface with three bands of three parallel lines each, passing round the circumference of the armlet, and in the spaces between the bands a series of slightly swelling lozenge-shaped ornaments beaten up from the back. This is the first example of this variety of bronze armlet which is known to have occurred in Scotland, and it is doubly interesting from the fact of its having been associated with a necklace of beads of jet.

(2) By J. W. CURSITER, F.S.A. Scot., Kirkwall.

A Selection from his Collection of Stone Implements, &c., from Orkney and Shetland, comprising:—

(1) Celt of polished yellow porphyrite, 12 inches long, $2\frac{1}{2}$ inches broad, and $1\frac{3}{8}$ inches thick, presenting an oval cross section in the middle of its length. It has a semi-circular cutting edge, and tapers to a conically pointed butt. One of the faces is convex, the other slightly concave lengthwise and a little flattened towards both ends; on this face there is a slight hollow across the centre, and several rough-surfaced depressions where the grinding has not reached. It was procured in the Island of Trondra, Shetland, and has been used for cutting some material which has stained the edge brown.

Celt of polished dark green serpentine found at Houlland, Stenness, Shetland, $10\frac{1}{2}$ inches long, 3 inches wide at edge, $1\frac{1}{4}$ inches wide at butt, $1\frac{1}{8}$ inch thick in the centre, with oval cross section in the centre, but slightly flattened on the sides close to the cutting edge.

(2) Celt of polished dark green serpentine, $4\frac{7}{8}$ inches long, 3 inches broad at edge, $1\frac{3}{8}$ inch thick, with oval cross section, and tapering to a sharp but fractured butt, found in a mound in Westray with No. 3.

(3) Celt of polished grey felstone, $6\frac{1}{8}$ inches long, $2\frac{1}{2}$ inches broad, $1\frac{1}{4}$ inch thick, with oval cross section; the edge is crooked and oblique and the butt slightly flattened. It is pitted all over where softer particles have decomposed, and on one of the faces near the butt there is a small patch of what resembles green serpentine. These two celts, (Nos. 2 and 3) were found in a mound at Gill Pier, Westray, as were also three or four human skeletons. This mound seems incorrectly

described as the remains of a Broch in the list of Orkney Brochs in *Archaeologia Scotica*, vol. v.

(4) Celt of polished jadeite of somewhat triangular form, $5\frac{1}{2}$ inches long, $3\frac{3}{8}$ inches broad at angles of edge, and $\frac{3}{4}$ inch thick in the centre, sharp all round and the butt pointed, slightly roughened on both sides about the middle, apparently for additional security in handling. It was said to have been found in Cunningsburgh, Shetland, but is almost identical in material and shape with one from New Caledonia in the Society's Collection.

(5) Celt of quartz, found in a field at Saverock, St Ola, Orkney, $5\frac{5}{8}$ inches long, $2\frac{1}{4}$ inches broad, and $1\frac{5}{8}$ inch thick, showing polish on one side and one face, the other side, face, and ends being decomposed or broken. It has had an oval or nearly circular central cross section and been obtusely sharpened at both ends, resembling an unperforated hammer head. Near it were found the butt of a polished celt of very small grained granite, a perforated hammer head, minus the ends, several small hammer stones, flint chips, and fragments of an ornamented clay vessel. Several stone cists were destroyed in this field about twenty years ago.

(6) Celt of polished serpentine, from Tingwall, Shetland, having the sides flattened and the edge nearly in line with one of the faces, which is flat, the other being convex, $3\frac{1}{10}$ inches long, $\frac{5}{8}$ inch thick, the edge nearly 2 inches wide, butt $1\frac{3}{8}$ inch wide.

(7) Celt of polished serpentine, found at Clivocast, Unst, Shetland, of somewhat similar form to that last described, $1\frac{3}{4}$ inches long, $1\frac{5}{8}$ inches broad at the edge, $1\frac{1}{8}$ inches broad at the butt, and $\frac{1}{2}$ an inch thick.

(8) Celt of greenish coloured granitic stone (one of three found at Housetter, Tingwall, Shetland), $9\frac{1}{10}$ inches long; the sides expand towards the cutting edge which is $3\frac{1}{4}$ inches wide, tapering to a conical shaped butt, and an oval cross section in centre which is $1\frac{3}{4}$ inches thick; the surface of this celt is very much decomposed, but traces of the polish are still discernible.

(9) Knife of serpentine, polished, found in North Mavin, Shetland, of somewhat triangular form, 8 inches long, $4\frac{3}{4}$ inches broad, and $\frac{5}{8}$ inch thick, sharpened on two edges, the other being rounded as if for holding in the hand.

(10) Knife of serpentine, polished, found at Scalloway, Shetland, of subquadrangular form, $5\frac{1}{4}$ inches long, $3\frac{7}{8}$ inches broad, and $\frac{1}{4}$ inch thick in the centre; it is sharpened to an edge on three sides, the other being rounded, and is almost identical in shape with fig. 263 of Dr Evans's *Ancient Stone Implements and Weapons of Great Britain*.

(11) Knife of black porphyrite with quartz crystals, of a curved shape, polished all over and sharpened to an edge all round; it was found in Delting, Shetland, and measures $5\frac{1}{2}$ inches long, $1\frac{9}{10}$ inch broad, and $\frac{4}{10}$ ths of an inch thick in the middle. This knife is of larger size but similar in form to one in the Society's collection.

(12) Rubber of black stone (material not known), from Scalloway, Shetland; it is ground all over, the faces flat, with rounded sides, straight edge and semi-circular butt, measures 1 inch thick, 3 broad, and $4\frac{1}{2}$ inches long; the edge is blunt and polished on both sides.

(13) Rubber of black porphyrite, with quartz crystals, polished, found in West Sandwick, Yell, Shetland, convex faces, flat sides, blunt edge, $2\frac{3}{4}$ inches long, $1\frac{1}{10}$ of inch thick in centre, $1\frac{1}{2}$ inches broad at edge, and $1\frac{1}{4}$ inches broad at butt, which is roughly squared.

(14) Rude stone implement of the type known as "Club-like," found in February 1883 at Housetter, Tingwall, Shetland, in peat moss. It is of the common sandstone of the district, and measures 17 inches in length and 3 inches diameter at the middle where it is nearly round; it is tapered to a point at one end, and is picked all over its surface except on one side for a space of 6 inches from the point where it appears to have been polished by friction.

(15) Rude stone implement of the same type, found in a stone cist in St Andrews, Orkney, of hard blue sandstone, 13 inches long, $3\frac{1}{2}$ inches broad, $1\frac{7}{8}$ inches thick, with flattened faces and rounded sides. It is chipped or picked all over its surface except on one face for a distance of 5 inches from the point, which is fractured.

(16) Rude stone implement of sandstone, $10\frac{1}{2}$ inches in length, $2\frac{1}{2}$ inches diameter in the centre and tapering to both ends, one end broken, the other pointed, the surface picked and partially smoothed, found at Scousburgh, Dunrossness, Shetland.

(17) Ornamented Stone Ball, found in St Ola, Orkney. (See *Proceedings*, 8th May 1882.)

(18) Ornamented Stone Ball of sandstone, covered with projecting knobs, found in Stenness, Orkney, identical in form with one found some years ago at Skaill, Orkney, and figured in the same article as the preceding.

(19) Perforated Hammer Head of gneiss, $3\frac{1}{2}$ inches long, $1\frac{3}{4}$ inches broad, and $1\frac{1}{8}$ thick, with rounded ends, flat on one face, and convex on the other, the sides rounded, the eye tapers from both faces and is situated a little towards one end; it was found in a field in Firth, Orkney.

(20) Spear-head of bronze, socketed, leaf-shaped, said to have been found in Lunnasting, Shetland, $10\frac{3}{4}$ inches long, the blade $6\frac{3}{8}$ inches long, and $2\frac{3}{4}$ inches broad at $5\frac{1}{2}$ inches from the point, very thin and strengthened by two ribs running parallel to the edge, one on each side of the mid rib, the socket is $\frac{4}{5}$ ths of an inch wide at mouth and extends upwards for $6\frac{3}{4}$ inches; on each side of the socket is a loop for securing it to the handle, the loops are flat and formed of two lozenge-shaped projections 1 inch long and $\frac{3}{4}$ inch broad. In character the spear-head resembles some from Ireland in the Society's collection.

(21) Lamp of sandstone, with thumb hold, found at Housetter, Tingwall, Shetland.

(22) Lamp of steatite for suspension by the two ends, from Clibberswick, Unst, Shetland.

(23) Bead of vitreous paste, found in Evie, Orkney, with spirals of yellow enamel; a size smaller but similar to one found at Slains and figured in *Proceedings*, vol. x. p. 699.

(24) Two Beads of vitreous paste, found in Holm, Orkney, one amber coloured, the other mixed and very much decomposed.

(25) Several Bone Implements, including a broch comb, long handled, made from the stump of a deer's horn, ornamented with design of St Andrew's Cross and having nine teeth, found in out-buildings at Broch of Lingrow, Orkney; several Borers, with piece of marked pumice on which they have been sharpened, from a broch on Toftsness, Sanday; and two chisel-shaped Bone Implements.

The following Communications were read :— .

I.

ON SOME BRAZILIAN WEAPONS AND OTHER ARTICLES. BY PROFESSOR
DUNS, D.D., F.S.A. Scot.

The weapons and other articles now shown to the Society seem to me of considerable interest, both because of the tribal elements which make up the present population of Brazil, and also because of their illustrative value in comparative ethnology. There is a large amount of material of this sort in the Society's Museum, which, while deserving of notice for its own sake, cannot fail to be helpful towards reliable inferences in regard to types of form in implements and weapons met with in Scotland. In archæology, as in natural history, specimens can never be so well known in a state of isolation as when set alongside of corresponding ones occurring in widely separated areas. To the happy phrase "the past in the present," we might add "the remote in the near at hand"—the one pointing to type, the other to geographical distribution of typical forms.

Humboldt estimated the extent of Brazil at 144,500 geographical square miles. The weapons to which the attention of the Society is now called were obtained in the provinces of Amazonas, 27,100 square miles, and Para, 22,500 square miles. Their rivers, the Amazon and La Plata, give an immense water-net, and afford in themselves and their tributaries a water-way into the interior. The inhabitants consist of the descendants of the Portuguese conquerors, immigrants from Europe and America, negroes introduced from Africa, and Red Indians estimated to number 500,000, who, by the inroads of the whites and the mixed families resulting from intermarriage with the blacks, have been driven into the interior, where they are met with on the banks of rivers, or in the wide plains, or, more frequently, in the dense virgin forests. Their comparative isolation, their indolence, and the tenacity with which they cling to old habits, give importance to their present customs, weapons, and industrial articles, and furnish the anthropologist with facts of

peculiar interest and value. Material in abundance for trustworthy generalisation in these points may already be found in the works of Ewbank, Kidder and Fletcher, Wallace, Bates, Keller, and H. H. Smith, especially when read in the light of the literature of travel in regions far separated from Brazil. This subject is very wide and might be very fully illustrated, but it can only be indicated here. The present notes are chiefly archæological and ethnological. The former relate to stone articles, the latter to arrows tipped with wood, bone, and iron, and also to some specimens of Indian pottery. The iron collar on the table is of some interest as an article once in common use but now fast disappearing, and which, not unlikely, will soon stand to recent Brazilian civilisation very much in the same relation as the Scottish iron-collar—the joughs—does to ours.

The stone specimens consist of two axe-heads, an arrow-head of pure quartz, a celt of nephrite, and an article the shape of a long pestle. The most massive of the axe-heads (1) is of yellowish quartz, containing comparatively large bits of a softer, but very compact, slate-like mineral taken up by the quartz in the process of infiltration. Its greatest length is $5\frac{1}{2}$ inches; greatest breadth, where the lateral bevel of the bevelled edge begins, $3\frac{3}{8}$ inches; breadth at top, $\frac{7}{8}$ of an inch; girth, a little above the bevel of the cutting edge, $8\frac{5}{8}$ inches, and about $\frac{1}{4}$ of an inch from the tip $3\frac{7}{8}$ inches. It is partially grooved on both sides, not at the edges; groove deepest at the middle.

The next specimen (2) is a green stone, with thickly disseminated crystals of augite. Length, $5\frac{3}{8}$ inches; breadth, where the lateral bevel begins $3\frac{5}{8}$, and at the tip $2\frac{1}{2}$ inches. Girth, a little above bevel of the cutting edge, $8\frac{2}{3}$, and at groove 7 inches. The groove lies on the whole of one side and on both edges, but the half of the other side is ungrooved. Looking at the grooving, not only of the implements before us but of many others I have examined, so great variety of modifications occur as almost to warrant the inference that the implement was made to suit the handle, not the latter for the former.

The celt, or, perhaps better, "the skinning knife," (3) is of nephrite. Length, $2\frac{2}{3}$ inches; breadth, at unbevelled sides of the bevelled edge $1\frac{1}{2}$ inch, at tip $\frac{7}{8}$ of an inch; polished both on the sides and margins, but

not sufficiently to hide the inequalities of the surface ; thickness, $\frac{1}{8}$ th of inch.

The arrow-head (4) consists of pure, diaphanous quartz. Length, $2\frac{2}{3}$ inches ; spatulose and bevelled at broad end, where it is $\frac{6}{8}$ of an inch broad ; on each margin a series of sharp points. This is an exceedingly pretty form. Like the others now noticed, it was obtained from uncivilised Red Indians. I have referred to it as a weapon, but it is doubtful if it was ever used as such. Keller and others described the xerembita, or lip-ornament of the Cyaowá, as a cylinder of from 12 to 15 centimetres in length, made of the transparent yellow-green of the jataha tree, inserted in a bamboo tube, and that worn by the Tupi as made of quartz, and worn only by the chiefs and the priests. It is inserted in the perforated under lip ; not unlikely this specimen was used as a lip ornament. But that stone arrow-heads were once much used by these Indian tribes is certain. "The Corvados," says Keller, "fasten old knife blades at the end of the arrows they use for the tiger (jaguar—*Felis onca*), tapir, and wild hog shooting. Formerly they had flint points, quite identical with those found in the Pfahlbauten. Hundreds of these are sometimes discovered in the sites of former settlements."

The only other article in stone to be noticed is the pestle-like form (5) now shown. It is of compact felspar, or felstone ; length, 1 foot $3\frac{1}{2}$ inches ; at the round point it is $1\frac{1}{8}$ inches in diameter ; at the heavy end a blunt oval—major axis $2\frac{1}{8}$ inches, minor $1\frac{6}{8}$ inches. It seems, from the indentations on the small end, that this was the one used for pounding. The arrow type of weapon was, no doubt, a slender straight stick sharpened to a point, and when the tip came to differ from the shaft, the type was not changed, it was only modified—the differentiations being all on the side of efficiency, stone tips being better than wood, bone almost as readily fashioned as stone and less liable to break, and iron more effective than either. The survival of all the forms among the great tribe of uncivilised men, may have no other meaning than that they find an arrow of one material better fitted for a special purpose than one of a different material would be. Keller informs us that the Indians on the Amazon and Madeira rivers make their bows of the dark wood of the *paxiuba* palm, and their arrows from the stems of the *ubá* reed.

In some of the ancient burial places axe-heads of diorite and other stone weapons are found alongside of arrows tipped, as at present, with bone and bamboo.

I have been warned to beware of abrading the skin when handling the arrows, as it is usual for their makers to touch the tip with the quick arrow poison—the woorare—prepared by the Indians from the juice of the bruised stems of several strychnos (chiefly *S. toxifera*), and dogbanes (*Apocynaceæ*). The juice is boiled over a coal fire, mixed with tobacco liquor and Spanish pepper (*capsicum*), and thickened with the milk of some *Euphorbiaceæ*. It is a dark-brown pitchy substance, and as a blood poison very deadly. Whence the knowledge of the noxious principles in these plants, and the skill in organic chemistry by which these Indians were enabled at first to prepare this poison? The question might be as aptly asked in regard to *mandioca*, the “Bread of Brazil”—farinha or cassava—obtained from the manioc plant (*Janipha maniçet*), one of the *Euphorbiaceæ*, by a process even more complex, in which the starch in the tubers is separated from a strong narcotic poison and utilised as bread. By a corresponding process, learned from the practice of the red man, the white man elaborates from the poison juice of the same tubers the well-known tapioca. The existence of such skill among tribes far remote from centres of civilisation, seems to indicate, with considerable emphasis, that the original state of the savage was not the savage state.

Of the arrows now noticed, five are tipped with wood of a different kind from that of the shaft, two are tipped with bone, and two with iron. Notices are of frequent occurrence in works in Brazilian travel of the use of stone arrow-heads at a comparatively recent period, if not even now, but I have not been able to get examples of head and shaft together. It is interesting to find within one area illustrations of most, if not of all, the materials in use for war arrows. I do not think, however, that the fact suggests chronological sequences of any sort, but simply that man can turn his environments to good account. Perhaps, in efforts to picture the resources of prehistoric tribes, too little account has been made of the varied purposes to which wood may have been turned, both for war implements and in industrial art. Looking at

these arrows, one is much struck with their neatness, and with the ingenuity employed in making them effective weapons. One of the Para wood-tipped forms consists of a slender but comparatively strong bamboo shaft, headed by about seven inches of hard wood tapering to a sharp point. This again is jammed into a piece of bamboo, more than twice the girth of the shaft, and about 14 inches long, shaped like a huge quill, and tied firmly to the hardwood tip. It must make a very ugly wound. The shaft is feathered by the primaries from the wings of the hornbill (*Buceros*). Two of the Amazonas specimens are mounted in a similar way, though they are in all respects much stronger. A Para specimen has the head piece of hardwood tapering to a fine point, near to which a bit of wood of a different kind, in form somewhat like a scalene triangle, is laid on the hard wood, the apex of the triangular piece reaching to near the point, the angle distal to the shaft being replaced by a process like a bird's claw. This forms the barb. One from Amazonas, smaller than these just mentioned, has a dangerous look about it, especially as it has been covered with the sharp arrow poison. Its shaft is of bamboo. Its long tip of hard wood tapers to a fine point, and by a simple process nine barbs have been formed a little below the tip. Weapons similar to those now described are also to be met with in Borneo and the Philippine Islands. Both of the bone-tipped specimens are from Para. The shafts are of pretty large reeds, topped, as in the wood specimens, with hardwood, in one case by a splice, in the other by being, fishing-rod like, fitted into the hollow reed, the top of the one piece and the bottom of the other being firmly tied to prevent splitting, while the string itself is so applied as to present a pretty wavy appearance. The bone tip of the one is comparatively broad, slightly bent in the middle, and with a spatulate point. The convex part lies on the straight wood, and is lashed to it so that its respective ends form point and barb. The tip of the other is affixed in the same way; both point and barb, however, are round instead of flat. The iron-tipped specimens have four-sided points and barbs. A good example of the bow in use among the Indians of Amazonas is shown along with the arrows.

It was a long time after the discovery of America that European

thinkers began to appreciate the value of the knowledge spread out before them. The old world had its history covering thousands of years, but here were immense numbers of men spread over a great continent, without written records, yet with aspects of industrial art and social life as varied and as well marked as those of Europe. And it is only at the present day that we are beginning to see the full significance of this. The immobility with which we have readily credited savage tribes, or tribes far remote and isolated from great centres of civilisation, is yearly having doubt cast on it by the literature of recent travel. Evidences are constantly turning up that there has been movement, though this has not been onward and upward. It has, on the contrary, been retrograde, as the fictile ware of so many tribes show. There are Red Indian antiques as well as Grecian. The contrast between the shape and ornamentation of the pottery of present Indian tribes, and that found in the graves of their ancestors is bold and striking. The advantage lies all with the olden times, both as to pattern and ornament, though the skill to utilise the only materials at hand is as well developed as before. The specimens on the table are good examples of modern Indian pottery. Judging them by touch and scratch, I was inclined at first to conclude they were of stone, but one of them, having been accidentally broken, presented a grain altogether unlike any mineral with which I am acquainted. The substance may be a preparation resembling that which was used by the Tennessee Indian tribes for the manufacture of pottery (Du Pratz, *Histoire de la Louisiane*, 1758. Dumont, *Memoires Historiques sur la Louisiane*, 1753). Having selected the best clay for the purpose, the Indian women pounded shells to a fine powder which they mixed with the clay by adding water and kneading it with feet or hands. H. H. Smith (*Brazil: the Amazons and the Coast*, p. 378) says of the South American Indian woman, with reference to the next step in the process :—"She forms long ropes of clay by rolling it on a board. The ropes are laid one over another from the edge of the circle (which forms the bottom) so as to build up the sides. At intervals the sides are shaped with calabash spoons, scraped with shells, and smoothed with a leathery fungus previously wetted. When the lower part is made it is set in the sun to harden, so that it will support the upper layers. Finally, the

edge is turned over and finished outside with a thin roll, marked with a jaguar's tooth. It is next baked over a hot fire of *jatahy* bark (*Hymenœa mirabilis*); the pot is then polished with a pebble, and varnished, while still hot, with *jatahy* resin." In some cases, instead of powdered shell, the clay is mixed with ash from the bark of a leguminose plant, the *caraipê-tree*, prepared for the purpose by being beaten in a wooden mortar.

The Brazilian Imperial policy in connection with slavery took a beneficent turn in 1852, when the African slave trade was declared illegal. Since then the amelioration of the slaves' condition has been steadily kept in view, while facilities for enabling them to purchase their own freedom have been greatly increased. In 1856, when Ewbank published his book, *Life in Brazil*, the condition of the slave was still miserable in the extreme. At the whim of their owners they might be scourged, loaded with iron shackles, or made to wear the tin "mask," "the log and chain," or "the iron collar." "The mask is the reputed ordinary punishment and preventative of drunkenness. It hinders her or him from conveying liquor to the mouth, below which the metal is continued, and opposite to which there is no opening. . . . Except a projecting piece for the nose, the metal is simply bent cylinder-wise. Minute holes are punched to admit air to the nostrils, and similar ones in front of the eyes. A jointed strap (of metal) on each side goes round below the ears, and meets one that passes over the crown of the head. A staple unites and a padlock secures them" (*Ewbank*). Its use, however, is not confined to drunkards only. Field negro women and girls were often forced to wear it. "The log and chain" was wont to be the usual punishment for a slave who had absconded, and it is still to be met with, though not so frequently as it was a few years ago. The log is fastened by a strong heavy chain to the neck or leg of the runaway. He is forced to labour with it, laying the log on the ground when at work, and bearing it on his shoulders when he walks. "The iron collar" is of "inch round iron, with a hinge in the middle, made by bending the metal of its full size into loops, the open ends flattened and connected by a half-inch rivet." The upright bar of the specimen before us is a large floreate-like cross, ten inches in height, the transom being nine inches. Its weight is 4 lbs. 11 ozs. When the rivet is in

its place it will thus be nearly 5 lbs. This yoke must be peculiarly galling. It is borne by day and by night. I have laid on the table another article of some interest. In 1856 Ewbank said—"Every gang of coffee carriers has a leader, who commonly shakes a rattle, to the music of which his associates behind him chant." We now know that the negroes borrowed this from the Red Indians. It is an imitation of their sacred instrument the *Maracá*, which is sounded at their religious dances and incantations.

I have thought that these ethnological notes might be of some interest to the Society, when associated with the weapons and other articles now exhibited, especially as most of the forms correspond with those in use in our own and other countries at kindred stages of civilisation.

II.

NOTICE OF A MURAL MONUMENT IN THE KIRK OF WEEM.

By A. H. MILLAR, F.S.A. Scot.

The old kirk of Weem, near Aberfeldy, contains one of the most peculiar mural monuments in Scotland, and as it has not hitherto been noticed, so far as I can find, a description of it may be of value alike to the antiquary and the genealogist. Some reference to the history of the kirk of Weem is necessary to account for the existence of the monument within its walls; and the greater portion of the following sketch is derived from charters and family papers in the possession of Sir Robert Menzies, Bart., of Castle Menzies.

The kirk of Weem stands in the midst of the old parish burying-ground, a few yards from the highway which leads from Aberfeldy to Castle Menzies, by General Wade's famous bridge over the Tay, and not far from one of the entrances to the castle grounds. Its history is intimately associated with that of the Menzies family. The oldest charter in existence at Castle Menzies was granted by John, Earl of Athol, *circa* 1296, and contains a special clause reserving the patronage of the church of Weem to the granter. On 23rd October 1440, King

James II. presented David Menzies, who had become a monk in the monastery of Melrose, to the rectory of the kirk of Weem. In 1463 the Earl of Athol gave a charter to John Menzies, bestowing upon him the presentation to the rectory and to the glebe; and this gift was confirmed by James III. in the following year. The "tak and assedatioun" of the kirk was assigned to Duncan Campbell of Glenurchy, ancestor of the Breadalbane family, in 1488; and when the barony of Menzies was erected in 1510, by charter from James IV., the patronage of the kirk of Weem was specially included in the gift. The existing building probably belongs to this period, and may have been built by Sir Robert Menzies about the time when he erected the Place of Weem, in 1488. Though used for devotional purposes within living memory, it has long been abandoned for the more modern edifice that stands near it; and it has been utilised as the family-vault of the Menzies family since the death of Sir Robert Menzies (born 1745, died 1813), grandfather of the present baronet.

The original structure has consisted of an aisle running north and south, with an offset towards the east, where the altar formerly stood, thus presenting the appearance of a small nave and choir, with one pseudo-transept at right angles to them. The dimensions are about sixty feet from east to west, by forty feet from north to south, the choir being about twenty feet wide. Over a small ambry in the south wall the initials of Duncan Menzies, father of the first baronet, and of his wife, Jean Leslie, sister of the Earl of Rothes, who were married in 1623, may still be traced. A door-way near the south-east corner, now closed up and almost overgrown with ivy, bears a heraldic shield carved on the stone lintel, on which the arms and initials of Sir Alexander Menzies (father of Duncan), and of his wife Margaret Campbell of Glenurchy are blazoned, with the date 1600, and the Latin inscription:—

CONTENDITE INTRARE PER ANGUSTAM PORTAM.
SANCTIS MORS IANUA VITÆ EST. MEMENTO MORI.

The knight thus commemorated was the builder of the monument which now stands within the old kirk, on the north wall of the choir.

Its form will be understood from the sketch now exhibited. It is richly carved and inscribed with armorial bearings, the lower portion forming a recessed altar-table, which projects beyond the line of the arch. On the pedestal at one side a male figure, nearly life-size, clad in armour, is mounted, the left foot resting on a skull, and one arm leaning on a cross, emblematical of Faith rising superior to Death. The open book in his hand has the Latin phrase carved upon it :—

QUIDQUID FIT SINE FIDE EST PECCATUM.

The opposite side of the monument is occupied by the well-known female figure with children, typical of Charity, and both figures are surmounted by elegantly carved canopies. A heavy moulded cornice runs horizontally along the whole structure, and at each corner a kneeling figure is placed, resting upon breaks in the cornice. These represent a knight of the sixteenth century and his lady, the latter holding a position over the figure of Charity, and the former appropriately situated on the same side as the mail-clad warrior, Faith. The faces of both effigies are turned towards the centre and apex of the monument, where a figure symbolical of the Creator is shown within a niche that rests on a truncated triangular pediment. The arms of Menzies and Campbell marshalled, and with their separate supporters, are carved on the façade of this pediment, together with the initials A. M. and M. C. Two angelic trumpeters recline on the cornice course, apparently summoning the dead to judgment; and before each of the kneeling figures a pedestal altar is erected, the upper surface being ingeniously sloped so that it may serve to represent a reading-desk to be used by them in the exercise of prayer. The spandrells between the arch and the cornice are filled in with cherubim holding wreaths with inscriptions, one of these being—*TRIUMPHI DEI GLORIA*, and the other—*GLORIA DEO, PAX HOMINIBUS*. The date of the erection of this monument is carved on the spaces between the canopies and the cornice, and is given as *Janua. 24. 1616*.

That portion of the structure which occupies the recess under the arch is of special interest, since the inscriptions declaring the meaning of the monument and the intention of its builder may be found there.

The emblems of death, the skull and crossbones, with trophies formed of mattocks and spades, a death-bell bearing the date 1613 (the date of the last death commemorated), and coffins radiating from a central cranium, are shown within a moulded circle; and on a large tablet beneath the following inscription, in somewhat obscure Latin, is cut:—

Regia me peperit genetrix stirps alta Britanni Atholæ at Lawers est mihi
avita domus, Atque abavam spectans Huntlaei filia pulchra est attaviae est
Edzel gens oriunda meæ.

D[eo] O[ptimo] M[aximo] S[equor]

Manibus et memoriæ illustris generosissimæ que herois Alexander Menzeis a
Veyme, et memoriæ Campbell suæ sponsæ qui Maiorum Boni nominis et
posteritatis ergo monumentum hoc extrui curarunt.

TRANSLATION.

My mother belongs to the royal race of ancient Britons of Athol, and Lawers is the house of my grandmother, and also my great-grandmother is a fair daughter of the renowned Huntleys, and my great-great-grandmother is derived from the family of Edzel.

To God, the Best and Greatest, and afterwards

To the manes and in memory of the illustrious and most noble heroines from whom Alexander Menzies of Weem descended, and in memory of Campbell, his wife, who have been careful of the good name of their ancestors, and for posterity, this monument has been built.

Around the large slab six smaller tablets are placed, bearing memorial inscriptions of the noble ladies commemorated, and accompanied by accurately carved heraldic bearings of their different families. Sir Alexander Menzies was twice married, and as both his wives were dead before this memorial was built, he has placed their names on each side of the emblematic circle. The latest tablet is on the side nearest the figure of Charity, and the others are arranged in alternate chronological order, so that the oldest name is on the lowest tablet near the figure of Faith. The inscriptions are literally as follows:—

Elizabeth Foster, filia Domini Garden sponsa se[cunda] domine Veym obiit
Veym 10 Novem. 1613.

Arms.—A chevron between three bugles.

Margaret Campbell, filia Domini Glenrvhye sponsa Domini Veym, obiit
z. 8. Sep. 1598.

Arms.—1st and 4th, gyronny of eight pieces ; 2nd, a fesse chequy ; 3rd, a galley, sails furled, oars in action.

Barbara Stewart, filia comitis Atholiæ sponsa Jacobi Mèzes. mater conditoris huius seplvchri obiit z. 2 Av. 1587.

Arms.—1st and 4th, a fesse chequy ; 2nd and 3rd, paly of six, surmounted by an earl's coronet.

Christina Campbell, filia domini Lavers, sponsa Alexandri Menzeis de Veym, avia dicti conditoris obiit.

Arms.—Gyronny of eight ; a bugle for difference.

Christina Gordó [filia] comitis Huntliey sponsa Roberti Menzieis de Veym, militis, atavia dicti conditoris obiit 1575.

Arms.—Quarterly ; 1st, three boars' heads, coupé ; 2nd, three lions' heads erased, langued ; 3rd, three crescents within a double tressure, flory counter-flory ; 4th, three cinquefoils, surmounted by an earl's coronet.

Margareta Lindsey filia domini Edgel sponsa Roberti Mèzes de Veym, militis, atavia dicti conditoris.

Arms.—1st and 4th, a fesse chequy ; 2nd and 3rd, a lion rampant, debruised of a ribbon in bend.

The front of the altar-table is decorated with three panels surrounded by carved scrolls in high relief, the top being supported by four tapering pilasters, embellished with floral incised designs. The keystone of the arch is carved into the shape of a cherub holding a shield, bearing the monograms A. M. and M. C. interlaced, and these arms are repeated separately upon shields placed over the course of the arch, one of the helmets surmounting the latter being placed contourné for decorative reasons.

No authentic history of the Menzieis family, some of whose members are commemorated in this interesting monument, has yet been published. Nisbet's account, which has formed the text-book of more recent writers, is inaccurate in several instances, and dubious in many particulars. The following references are taken from a genealogical tree which I drew up last year for a special purpose ; and as it was founded upon charters and documents in existence in the charter-room at Castle Menzieis, the statements may be accepted as authoritative.

The place of origin of the Menzieis family is not certainly known. The earliest form of the name in Scotland was *Meygners*, and it is

supposed that the family can claim descent from the same stock as the noble family of Manners, now represented by the Duke of Rutland.

The first Menzies whom we can positively identify is Sir Robert de Meyners, who was made Great Chamberlain of Scotland when Alexander III. ascended the throne in 1249, and demitted that office in 1253. His name appears as witness to a charter in 1248, and he died (according to Fordun) in 1266. His son, Sir Alexander de Meyners, enjoyed the favour of Alexander III. until that monarch's death, and afterwards distinguished himself in the War of Independence, suffering a short period of imprisonment for his opposition to the designs of Edward I. He was the first of the family that settled at Weem, having obtained a charter of lands, in the neighbourhood of Aberfeldy, from John de Strathbogie, Earl of Athol, in 1296. He was married to Egidia Stewart, daughter of James, High Steward of Scotland (1243-1309), and Cecilia, daughter of the Earl of March; and he died in 1332, having survived his fellow-soldier and liege-lord, King Robert the Bruce, three years. In 1390, Sir Robert de Menzies, great-grandson of Sir Alexander, was shield-bearer to Robert II. and to John, Earl of Carrick, who afterwards became the second of the Stewart dynasty under the title of Robert III. Sir David de Menzies, grandson of Sir Robert, held an important position at the Scottish Court after the death of Robert III. (1406), and was named as one of the hostages for James I. in 1423. In the same year he was made Commissioner of the Islands of Orkney and Shetland, by King Eirik of Denmark, Sweden, and Norway, during part of the minority of William Sinclair, the last of the Earls of Orkney. In 1440 he finally renounced the world, and sought the seclusion of a monastic cell within the Abbey of Melrose, where he spent the remainder of his days. Local tradition still associates the name of Sir David with the Holy Well of St Cuthberht, which occupies a position upon a shelving rock on the hill of Weem called *Craig-an-t'Shapail*. As has been said, he obtained from James II. the presentation to the kirk of Weem in the year of his retirement, and probably died shortly afterwards.

Sir John de Menzies, son of Sir David, according to Wyntoun, was "banneoure" or standard-bearer to the Earl of Mar, son of the Wolf of

Balenoeh, and accompanied him to France, taking part in the battle of Liege in 1408. The chronicler relates an incident of this campaign, that had been told him by some eye-witness, and which redounds to the credit of Sir John as a martial hero.¹ He died *circa* 1451, and was succeeded by his second son John, who died in 1487 leaving one son, Sir Robert, the first of the family whose name appears on the mural monument.

Sir Robert Menzies is memorable in the annals of the family as the builder of the place of Weem. The former residence of the Menzies family was at Comrie Castle, on the banks of the Lyon; but as that place was partially destroyed by fire in 1487—the year of Sir Robert's accession—he erected a new castle near the base of the rock of Weem, at a short distance from the site of the present Castle-Menzies. Shortly after its completion (1503) the Place of Weem was destroyed by fire during a raid by the Stewarts of Fothergill. Sir Robert took legal action against the Stewarts, and though he obtained a decree from the Privy Council, ordering payment to be made for the damages he had suffered, his son had not obtained satisfaction of the claim fifty years after, as it was renewed during the reign of Queen Mary in 1553. Sir Robert obtained a charter from James IV., erecting his possessions in Strathlathay and elsewhere into the free barony of Castle-Menzies. He was married to Margaret, daughter of Sir David Lindsay of Edzell (*ob.* 1527), ancestor of the Earls of Crawford, and Catherine Fotheringham of Powrie, and was great-great grandfather of the builder of the monument in the kirk of Weem.

Sir Robert Menzies, knight, eldest son of the last-named, succeeded his father *circa* 1520, and was married to Christian Gordon, the second "heroine" commemorated by the inscriptions on the monument. This lady was the daughter of the third Earl of Huntly and Lady Janet Stewart (married 1503), the latter being the daughter of John, Earl of Athol, uterine brother of James II. Lady Christian Menzies died in 1575, having survived her husband for several years. Her son Alexander Menzies (1536–1558) was married to Christian Campbell, daughter of the Laird of Lawers, whose remote representative is the present Earl

¹ *Cronykil of Scotland*, xi. 27.

of Loudoun. The date of this lady's death is not recorded. Her eldest son James is memorable as the builder of the older portion of the present Castle-Menzies, which he completed in 1571. He was married to Barbara Stewart, daughter of the third Earl of Athol (*ob.* 1542), and died 29th July 1585. His wife survived him for two years, dying, as the monument records, in 1587, and it was her son Alexander who erected this quaint memorial of his ancestry in the female line.

Sir Alexander Menzies was not of age when his father died, but the exact year of his birth has not been recorded. He was Member of Convention for Perthshire in 1625, and survived his eldest and second son, the latter of whom died in 1631. As he was competent to sign a legal document in 1588, we may conclude that he was born *circa* 1567. In 1488 a bond of manrent was made between the then Laird of Weem, Sir Robert Menzies, and Sir Duncan Campbell of Glenurchay, and exactly one hundred years afterwards their descendants, Sir Alexander Menzies and Sir Duncan Campbell, renewed the connection, which had been temporarily interrupted, by a "bond of freindschip and amitie," dated 1588. The marriage of Sir Alexander and Margaret, daughter of Sir Duncan Campbell of Glenurchay, probably took place shortly after this time, as Sir Alexander is referred to as Sir Duncan's son-in-law in a second bond, dated 1596. Sir Alexander seems to have been specially proud of his alliance with Margaret Campbell, as he has used her heraldic bearings in conjunction with his own very profusely throughout the kirk, even to the neglect of his second wife, Elizabeth Foster's, meed of attention. Margaret Campbell died, according to the inscription upon her tablet, on the 8th September 1598, and the first memorial of her was the inscribed lintel over the door to which allusion has been made, and which was erected in 1600. Two sons and three daughters were born of this marriage,—(1) John, died, *vitâ patris*, before 1623; (2) Duncan of Comrie, married to Lady Jean Leslie, daughter of the Master of Rothes, in 1623, and died, *vitâ patris*, 1631, leaving a son, Sir Alexander, who succeeded his grandfather and was created first Baronet of Castle-Menzies in 1665; (3) Grizel, married to Sir Thomas Stewart of Grandtully, knight (born 1608, died 1688); (4) a daughter; (5)

Margaret (*ob.* 1670), married to Colin Campbell of Mochaster (*ob.* 1668), second son of Sir Robert Campbell of Glenurchay, ancestor of the fourth Earl of Breadalbane.

Of Sir Alexander's second wife, Elizabeth Foster, daughter of the Laird of Garden, no particulars have been preserved amongst the family documents. She was probably a descendant of Sir Duncan Forrester of Garden, king's comptroller, whose family was connected officially with the burgh of Stirling for a very long period. She seems to have had no children, and her death took place in 1613, as recorded on the monument, which was erected three years afterwards.

Sir Alexander Menzies must have married again shortly after the decease of his second wife, as it is recorded in the *Register of Sasines* for Perthshire, that in 1617 he and his spouse, Marjory Campbell, obtained a charter from William Murray, second Earl of Tullibardine, of "the mains of Garth, with the castle thereof," in conjunct fee to themselves and their heirs. I have been unable to discover anything further regarding this marriage. The Privy Council issued a licence, now in the charter-room at Castle-Menzies, "to Sir Alexander Menzies of Weem, his lady, and such persons as might be at table with them, to eat flesh during Lent, and on the forbidden days of the week, for the space of a year." The licence is dated "Holyroodhouse, 11 March 1628," and as Sir Alexander was certainly alive when his second son Duncan died, in 1631, it can refer to no other person. His grandson, Sir Alexander, who succeeded him, could not be more than four years old at this time, and there is no similar person to whom this document could apply.

The genealogy of the family of Menzies from the time of the first baronet (*ob.* 1695) till the present day, may be found in every Scottish Baronetage, and need not be pursued further. The foregoing sketch, however imperfect, is sufficient to show the relationship of the "illustrious heroines" to the builder of this interesting monument; an instructive example of Jacobean sepulchral art.

III.

NOTICE OF THE DISCOVERY, NEAR BROUGHTY FERRY, OF AN
ANTIQUE ECCLESIASTICAL GOLD FINGER-RING. BY ALEXANDER
HUTCHESON, F.S.A. SCOT., ARCHITECT, DUNDEE.

A beautiful and interesting finger-ring was discovered in the neighbourhood of Broughty Ferry several years ago, and came under my notice last year. Most unfortunately the ring has since gone amissing. Luckily before this, I had had an opportunity of making a drawing of it.

The ring was found some four years ago by a labourer while removing the ruins of an old cottage a short distance to the north of Broughty Ferry, but whether found in the walls, or in the ground while clearing out the foundation, has not been ascertained, as the original finder has not been seen. The ring was considered to be of brass, and was handed by its finder to an acquaintance, who took it home, and threw it into a little box amongst buttons, &c., where it lay unheeded for about three years, until the month of June last year, when he gave it by way of a jocular present to a friend, who shortly thereafter showed it to me. Perceiving that the ring was ancient, I obtained his permission to take it away for a more careful examination, at the same time mentioning a desire to show it to Dr Joseph Anderson. Happening to be in Edinburgh, a few days thereafter I took the ring with me, but found that Dr Anderson was from home. I however showed the ring to Dr Arthur Mitchell, and to Mr Carfrae, and to Mr Sim. These gentlemen were all greatly interested in it, and advised me strongly to endeavour to secure its ultimate deposition in some place of safety. This I was the more anxious to do, knowing from sad experience the usual fate of such articles when left in the hands of those who do not know their value, nor appreciate the interest attaching to them. My efforts in this direction, however, were unavailing, the possessor of the ring steadfastly refusing all advances.

A few weeks after I had returned the ring, my worst fears were realised by his informing me that it had gone amissing. He had laid

it in a little box on the mantle-shelf, whence it had either been abstracted or overturned into the hearth amongst the ashes, and hitherto the most careful search and inquiry have utterly failed in getting any clue to the missing ring.

Such is the disappointing history of the recovery and loss of this most interesting relic of antiquity, which, having safely escaped the vicissitudes of several centuries, and the scarcely less precarious treatment of its finders, has by the most culpable and deplorable carelessness been suffered once more to slip out of sight,—the fate of too many valuable antiquities, the loss of which we have to deplore, as the result of their remaining in the hands of individuals not alive to their value.



Figs. 1, 2. Ecclesiastical Gold Finger-Ring found near Broughty Ferry. Side and front views (actual size).

Fortunately, as I have said, before giving up the ring, I made the accompanying careful drawing and description.

The ring (fig. 1) was of 18 carat gold of the usual hue, and weighed 6 dwts. 5 grs. troy. Its dimensions were as follows:—Opening $\frac{3}{4}$ inch, narrowest part of hoop $\frac{5}{8}$ of one inch, widest part of hoop $\frac{7}{8}$ inch. It bore, where the signet usually is, two slightly averted elongated, and somewhat oblate hexagonal panels, each surrounded by a plain border, and containing, in that on the right hand side, a figure of the Madonna and Child, and in the other a priest or other ecclesiastic in the act of blessing the sacramental cup (see fig. 2). These figures were executed with great delicacy and beauty in low relief, very slightly hatched, the outlines and background being filled in with black enamel.

The Madonna is seated, and wears a crown exhibiting three points of floriated design; a veil droops from the edges of the crown, and falls behind the shoulders. A mantle depending from the shoulders meets

below the waist, and enwrapping the knees falls in graceful and massive folds to the feet, which, as in the best periods of art, are not visible. The right knee of the Madonna is slightly raised as if to aid in supporting the child. Strange to say, no trace of the Madonna's arms or hands could be observed, probably out of deference to the same sense of decorum which dictated the covering of the feet. The under garment visible from the neck to the waist is lightly hatched, as if to show folds or shading of the dress. The child rests on the mother's right side, and appears to be almost wholly naked, a line across the shoulder or armpit being the only indication of a little tunic which left the arms bare from the shoulder. The right leg and arm of the infant stretch across its mother's breast, and the child's fingers are extended in the act of benediction.

The priest appears to be standing; a nimbus, or more probably a sort of hood, surrounds his head. His right hand only is visible, and is raised in the act of blessing the cup, the forefinger being so much enlarged as at first to suggest the idea of its having been meant for two or more fingers, but the other three fingers are distinctly visible. The cup is of graceful outline, and appears to rest on a stand or altar, which is entirely covered with drapery. The background of the panels, as well as the principal outlines of the figures, had been filled in with black or very dark enamel. Beyond the panels at either end the ring was gradually tapered off with a highly ornamented series of enamelled bands, alternating with gold bands, ridged and engraved crosswise with simple lines, and twisting obliquely until lost at the under edges of the hoop. Although the most of the enamelling had been lost from these bands, fortunately enough was left to show what the ring was like when it was entire. First on opposite sides were two small triangular patches of white enamel almost entire; next to these came a band of bright red or scarlet enamel; then a band of purplish chocolate; next a band of bright or emerald green, but there was not a speck left in the outer band on either side to show of what colour the enamel there had been. There were thus five or perhaps six colours of enamel. The enamels had been placed in little sunk panels or channels graved or beaten out in the gold which rose in little ridges at either side of the channels, and

indicated therefore that they belonged to the description of work called Cloisonne.

As to the period to which this interesting relic is to be assigned, a short review of the leading characteristics of the figures and their import may help to a conclusion. In all early representations of the Madonna the head is veiled. The enthroned Madonna unveiled, with long tresses falling down in front of the shoulders on either side, was an innovation introduced about the end of the fifteenth century. In historical pictures her dress is very simple, but in devotional pictures, which represent her as Queen of Heaven, she wears a crown, and is often attired with great magnificence. It does not appear when she is first represented crowned, but an example exists as early as the eighth century on a mosaic in the Cathedral of Capua. It is necessary, however, to discriminate between the crowned Madonna holding her child, where the crown is introduced merely to heighten devotional feeling, to which type the figures in this ring are to be assigned, and those figures where the Madonna is represented in the act of being crowned by the Father or the Son, which are to be ascribed to the dramatic and historical type. The child in her arms in all early pictures is always clothed in a little tunic. Towards the early part of the fifteenth century, He first appears partly and then wholly undraped. The Virgin is rarely represented standing before the end of the fourteenth century. For these particulars I am largely indebted to Mrs Jamieson's valuable work, *Legends of the Madonna*.

A consideration, then, of these well-marked features in the treatment of the figures of the ring as well as a regard for the delicacy and beauty of the workmanship, as also of the style of enamelling, would seem to assign this ring to a period not very far from the close of the fourteenth century.

IV.

NOTICE OF THE DISCOVERY OF TWO CISTS WITH URNS OF STEATITE,
IN THE PARISH OF SANDWICK, ORKNEY. BY WM. G. T. WATT,
OF SKAILL, ORKNEY.

In the summer of 1883 a steatite urn was discovered by a herd boy digging to get at a "bee's byke" in the centre of a tumulus on Gyron Hill, Sandwick. It was not disturbed until I was present. A flat stone lay on the ground, and the urn stood on it mouth upwards. It was built round about with stones, and across the top of the building and over the urn was laid a heavy flag cover. Clay had been packed above and around the outside of the cist. The urn was filled to within two inches of its brim with calcined bones. The contents were carefully examined, but nothing was found among the bones. The urn is 16 inches across the mouth one way and 15 inches the other, and stands 11 inches high. Underneath the rim it has two incised lines drawn round the outside by way of ornamentation. A neatly prepared slate stone, 10 inches by 8 inches, and oval in shape, forms the bottom of the urn, and rests on a narrow ledge or groove running round the inside.

The only implement found about the mound was a rude stone, 19 inches long, 4 inches broad, and about 2 inches thick, made sharp and slightly polished at the end. Mr Robert Stewart Clouston, who was with me when taking the urn out, drew my attention to this stone, it being like some among his interesting collection of rude stone implements found in this parish.

I may mention that within 50 yards there are several other mounds.

Last month, January 1885, the tenant of South Scatter brought me a small steatite urn, in fine preservation, which had been found in a cist on Gyron Hill, Sandwick, and not far from where the one just described was got. The cist in this case is placed in a low natural knowe or rising ground of stiff clay, and from the general appearance of the soil I am of opinion that no mound had ever been erected over it. The sides and ends of the cist were formed by four carefully dressed flags resting on a

large flat stone, and the cover was a neatly fitting slab, above which about 2 inches of clay was well packed. The grave, which is 28 inches in length, lies south-east and north-west. The south-east end is 15 inches and the north-west end $17\frac{1}{2}$ inches in width, and the depth is 22 inches. It contained a few burnt bones, a small quantity of earth, and the urn, which was found in the north-west corner. The dimensions of the urn are 5 inches across the mouth in the longest diameter, and in the shortest $4\frac{1}{2}$ inches, and 3 inches high. It measures across the bottom 4 inches by 3 inches. Immediately below the rim is a flat incised band running round the exterior. This urn is smaller, but in general appearance very like the one found in 1874 in Fair Isle.

Both the urns I have now described are in my collection at Skail House.

MONDAY, 13th April 1885.

SIR W. FETTES DOUGLAS, LL.D., P.R.S.A., Vice-President,
in the Chair.

A Ballot having been taken, the following Gentlemen were duly elected Fellows :—

P. J. ANDERSON, M.A., LL.B., Chairman of Scottish Training College,
Aberdeen.

ALEXANDER B. ARMITAGE, Accountant, 14 Dick Place.

Major FRANCIS BALFOUR of Fernie Castle, Cupar-Fife.

JAMES M'CALL, 6 St John's Terrace, Hillhead, Glasgow.

CHARLES ARUNDEL PARKER, M.D., Gosforth, Cumberland.

CHARLES ROBERTSON, Redfern, Colinton Road.

ANDREW ROSS, S.S.C., 4 Warrender Park Terrace.

RANDOLPH ERSKINE WEMYSS of Wemyss Castle and Torrie.

The following Donations to the Museum and Library were laid on the table, and thanks voted to the Donors :—

(1) By WILLIAM ROBERTSON, 13 Pitt Street, Leith.

Axe of granitic stone, $8\frac{1}{2}$ inches in length, quadrangular in the cross section in the middle of its length, irregularly rounded towards the butt, and slightly hollowed as if for tying on to the shaft. The locality is unknown, but probably from British North America.

(2) By Rev. ALEXANDER GORDON, LL.D., Oaklands Grove, Shepherd's Bush, London.

Collection of 112 Flint Flakes, and broken and splintered nodules of flint, of which a number exhibit secondary working, found in the Cabrach, Banffshire.

Spherical Hammer-stone of quartz, from the Cabrach, Banffshire.

One of the halves of a Bullet-Mould of claystone, from the Cabrach, Banffshire.

Upper stone of a Pot Quern of sandstone, $8\frac{1}{2}$ inches diameter and 3 inches in thickness, with a pivot hole in the centre, and a semi-circular indentation in the margin, from Strathpeffer, Ross-shire.

Flat oval Pebble of schist, indented on both sides, from Rhynie, Aberdeenshire.

Portion of a Sculptured Slab of reddish sandstone, 17 inches in length by 10 inches in breadth, bearing on one side two contiguous rows of incised diagonal fretwork, from Drainie, Elginshire.

(3) By DAVID GREIG, 14 Greenhill Park.

Mounting of bronze, consisting of a bar, 4 inches in length, with masks at the terminations, and with a side bar attached, which is bent into a semicircular form, with a diameter of 2 inches. On this semicircular projection rest the hind legs of two leopards, whose fore legs are disposed so that the right paw rests on the top of the mask, and the left on a raised portion of the bar immediately beneath it, the backs of the animals leaning inwards towards each other, and the heads turned outwards and looking in opposite ways. The spots on their skins are rendered in niello. The derivation and purpose of the mounting are

unknown. It was rescued by Mr Greig from amongst a quantity of old brass that was about to be consigned to the melting pot.

(4) By W. SCOTT ELLIOT, Arkleton, Langholm.

Bronze Palstave or Flanged Celt, $4\frac{1}{2}$ inches in length, the flanges expanding in a triangular form and slightly bent over, the cutting edge almost semicircular, the peaked ends broken off, as is also a portion of the butt at one side. There is no stop-ridge. This specimen (fig. 1) was found in Canonbie, Dumfriesshire, by Mr Thomas Telfer, by whom



Figs. 1, 2. Flanged Celts, found at Canonbie, Dumfriesshire, and at Watten, Caithness.

it was given to the donor. It belongs to a well-marked variety of the general type of flanged celts or axe-heads of bronze, which have been found nearly all over Scotland; but it is the first specimen of the variety which the Society has been able to obtain from that part of Dumfriesshire. For the sake of comparison, a somewhat more perfect specimen of the same form, found in the parish of Watten, Caithness, is also here engraved. It differs from the Dumfriesshire example only in having a well-defined stop-ridge. It measures $4\frac{1}{2}$ inches in length

and $2\frac{1}{4}$ in greatest width across the cutting face. This characteristic specimen was presented to the Museum in 1871 by Captain Alexander Gunn of Braehour, Caithness.

(5) By ROBERT CARFRAE, F.S.A. Scot., Curator of the Museum.

Bracelet of bronze, hollow, and of one and a half twists, the ends overlapping, and ornamented with bands of engraved lines, from Fiesole, Italy.

(6) By FRANCIS WHELAN, through R. CARFRAE, F.S.A. Scot.

War Medal of Silver, Abyssinian Campaign, 1871.

(7) By Messrs MACKAY & CHISHOLM, Jewellers, 57 Princes Street.

Case of Balance Covers (thirty-five specimens), taken from old Verge Watches, eighteenth century.

(8) By Sir ARTHUR HALKETT, F.S.A. Scot.

Tattooed Head of a New Zealand Chief, brought home about the year 1818, by Captain Halkett, E.I.C.S.

(9) By Professor DUNS, D.D., F.S.A. Scot.

Diploma of the Revolution Club in favour of Mr Gilbert Burd, Writer in Edinburgh, 3rd June 1755.

(10) By ALEXANDER J. WARDEN, F.S.A. Scot., the Author.

Angus or Forfarshire, the Land and People, Descriptive and Historical. Vols. IV. and V. 4to. 1885.

(11) By the LORDS COMMISSIONERS OF H.M. TREASURY, through the CONTROLLER OF H.M. STATIONERY OFFICE.

Publications of the Record Commission, viz. :—

Rotulorum Abbrevatio. Ed. III. Edited by H. Playford. Vol. II. Folio.

Domesday Book, Indices and Addit. Edited by Ellis. Vols. III, and IV. Folio. 1816.

Calendars of Proceedings in Chancery. Ric. II. and Eliz. Edited by J. Bayly. Vol. III. Folio. 1832.

Excerpta e Rotulis in Turri, Hen. III. Edited by C. Roberts. Vol. II. Royal 8vo. 1836.

Calendars and Inventories of Exchequer. Edited by Sir F. Palgrave. 3 Vols. Royal 8vo. 1836.

Rot. Chart. in Turri, 1199-1216. Edited by T. Duffus Hardy. Folio. 1837.

Record of Caernarvon. Edited by Sir H. Ellis. Folio. 1838.

Ancient Laws and Institutes of Wales. Edited by Aneurin Owen. 2 Vols. Royal 8vo. 1841.

Rot. de Liberate, &c. Reg. Johanne. Edited by T. Duffus Hardy. Royal 8vo. 1844.

Great Rolls of the Pipe. Edited by Rev. J. Hunter. Royal 8vo. 1844.

Modus Tenendi Parliamentum. Edited by T. Duffus Hardy. 8vo. 1846.

Issue Roll of Treasury Payments, 44 Ed. III. 1370. Edited by F. Devon. Royal 8vo. 1835.

Issues of Exchequer, Hen. III.—Hen. VI. Edited by F. Devon. Royal 8vo. 1837.

Handbook to the Public Records. By F. S. Thomas. Royal 8vo. 1853.

State Papers, Reign of Henry VIII. 11 vols. 4to. 1830-1852.

The following Communications were read :—

I.

NOTICE OF A MANUSCRIPT OF THE LATTER PART OF THE FOURTEENTH CENTURY, ENTITLED *PASSIO SCOTORUM PERJURATORUM*. BY THE MOST HON. THE MARQUESS OF BUTE, K.T., F.S.A. SCOT.

Mr Henry Gough, to whose learned researches I stand much indebted, had the goodness some time ago to send me a transcript of two pieces contained in a MS., written towards the close of the fourteenth century, and now deposited in the Public Library of Reigate Church, Surrey. This MS. contains, among other things, Lives of the Archbishops of Canterbury, ascribed to Stephen Byrchington, a monk of the same church (1382-1407). The authorship of the other treatises is uncertain. One of them is a Chronicle of England from Brutus. The pieces sent to me are a Scotch Chronicle, mainly extracted from the other, and entitled *Gesta Scotorum*, and another piece embedded in it, and entitled *Passio Scotorum Perjuratorum*. The *Gesta* reach from 1066 to 1327, then comes the *Passio*, followed by a loss of some leaves, after which the *Gesta* continue, reappearing in the midst of the description of the battle of Halidon Hill (1333), and going down to the defeat and capture of David II. at Neville's Cross, Oct. 17, 1346.

The *Passio* offers several instances of copyist's blunders, which show that it is not the original or only copy.

The *Passio* is a would-be comic narrative of events between Feb. 1306 and Feb. 1307. Its chief characteristics are cruelty and profanity. It is in the form of a parody on Scripture, and belongs altogether to that class of things to which one naturally applies the line of Dante—"Non ragionam' di lor', ma guarda, e passa." In this case, however, it happens to be a very curious historical monument. The composition is headed "*Leccio Actuum Scotorum, infra librum Judicium*," after the manner of a Church Lesson from the Acts of the Apostles. It is true that it commences with a portion of the Book of Judges, but the contents leave no doubt that there is here a *double-entendre*, and a reference to the judges of ordinary criminal courts. The *Leccio*, after

the common opening words of an ecclesiastical lesson from the middle of a book, "In diebus illis," gives the parable of the trees choosing a king, in Judges ix. 8-15. There is nothing peculiar about it, except that in verse 13, where the vine speaks of "my wine which cheereth God and man," the reference to God (which doubtless regards the wine-libations at sacrifices) is omitted. As this omission, however, is pointless, I am inclined to attribute it to a mere slip of the pen. After the parable, the composition, again mimicking church forms, ends the quotation by "Et reliqua," and then, with the heading "Homilia ejusdem," and the opening words "In illo tempore," at once begins the parody:—

OMELIA EJUSDEM.

In illo tempore, videlicet anno Domini M^oCCC^{mo} sexto, facta est contencio inter non discipulos Jhesu, sed inter majores Scocie, quis eorum in malicia videretur esse major.

Dixerunt autem, Reges gentium Anglicarum dominantur nobis et qui potestatem exercent in nos inimici nostri, non benefici, nominantur. Sed qui majorem potestatem habet inter Scotos, superior noster fiat.

Constituamus ergo nobis Regem, sicut et cetera nationes habent, qui excuciat cervices nostras ab Angligena servitute, et in prelio nos defendat.

Ecce postquam recessimus a patriis legibus et fidei juramento, invenerunt nos mala multa quorum non est numerus propter decentiam status nostri.

HOMILY UPON THE SAME.

At that time, which is to say, in the year of the Lord one thousand three hundred and six, there was a strife among them which were, not the disciples of Jesus, but the chief of Scotland, which of them should be accounted the greatest in naughtiness.¹

And they said: The kings of the English Gentiles exercise lordship over us, and they that exercise authority upon us are our enemies and not called benefactors.² But he that hath the greatest power among the Scots, let him be over us.

Therefore let us make unto ourselves a king, like the other nations, to break the yoke of the English from off our necks, and to defend us in battle.³

Behold, since we left the laws of our fathers, and the oath of our fealty, many evils are come upon us that cannot be numbered, because of the weakening of our state.⁴

¹ Luke xxii. 24.² Luke xxii. 25.³ 1 Sam. viii. 5; Gen. xxvii. 40.⁴ 1 Macc. i. 12, *decentiam* seems to be a mistake for *decedentiam*.

Provide dixerunt olive, id [est],
Comiti de Bowan, Impera nobis.

Qui respondit, Non possum deserere
pinguedinem meam, id [est], fidem
meam, ex qua justus vivit, et venire
ut inter ligna bifurcata promover.

Dixeruntque ad arborem ficum, id
[est], Comiti de Ros, Veni, et accipe
super nos regnum.

Qui respondit, Numquid possum
deserere pinguedinem meam et fructus
dulcissimos, id [est], vinculum jus-
jurandi quo proximus proximo Deo-
que constringitur, et ire ut inter ligna
maledictionis commovear? Pro male-
dicto enim habetur homo omnis qui
pendet in ligno.

Locuta sunt quoque ligna ad vitem,
id [est], Comitem Patricium, Veni, et
impera nobis.

Qui respondit, Numquid possum
deserere vinum meum, id [est], robur
fidelitatis mee, quod tactis sacrosanctis
Evangeliiis coram Deo pollicitus sum,
servire Regi Anglie, et ire ut inter
ligna mortifera, flexo poplice et trun-
cato capite, laurea perjurii merear
coronari?

Dixeruntque ligna ad rampnum, id
[est], Robertum le Brus, Comitem
de Carrike, Veni, et impera super nos
Qui respondit eis, Si vere me Regem

They said [therefore] unto the olive
tree, that is, unto the Earl of Buchan :
Reign thou over us.¹

And he said unto them : I cannot
leave my fatness, that is, my faith
(but the just doth live by faith), and
go to be promoted among the gallows
trees.²

And they said to the fig-tree, that
is, to the Earl of Ross : Come thou,
and reign over us.³

But he said unto them : Can I for-
sake my fatness, and my good fruit,
that is, the bond of mine oath where-
by one neighbour is bound unto
another, and [man] unto God, and go
to be moved up upon the accursed
tree? ⁴ For cursed shall be every man
that hangeth on a tree.

The trees also said unto the vine,
that is, unto Earl Patrick, the Earl of
Dunbar: Comethou, and reign over us.⁵

And he said unto them : Can I
leave my wine, that is, the strength of
my fealty which I have promised
before God, with mine hands upon the
Holy Gospels, to serve the King of
England, and go to earn to be crowned
with the crown of perjury among the
deadly trees, with my knee twisted
and mine head cut off? ⁶

And the trees said unto the bramble,
that is, unto Robert Bruce, Earl of
Carrick : Come thou, and reign over
us.⁷ And he said unto them : If in

¹ Judges ix. 8, *Provide* probably by mistake for *proinde*.

² Judges ix. 9, and Gal. iii. 11, adhering to the Vulgate.

³ Judges ix. 10.

⁴ Judges ix. 11. (*Pinguedinem* probably by accident for *dulcedinem*.) Deut.
xxi. 23; Gal. iii. 13.

⁵ Judges ix. 12.

⁶ Judges ix. 13. I cannot explain the reference to the twisted knee, unless it be
its kneeling at the block.

⁷ Judges ix. 14.

constituistis, venite et preceptis mei culminis obedite. Si autem nolueritis, egredietur ignis de rampno et consumet cedros Libani; hoc est,

Vos vocatis me Regem et dominum, et bene dicitis. Sum etenim primogenitus patris mei, cui regnum hoc jure hereditario debebatur, sed a domino Rege Anglie alteri est translatum.

Venite ergo ad me omnes qui pacem negligitis, guerram cupitis, perjuri ac suspensi eritis, et ego vos reficiam de cruore occisorum et de captivitate nudati amicorum capitis.

Et sub umbra, id [est], vocacione regalis nominis mei, severe proficis cimini per totam Scociam, compellentes Episcopos, Abbates, Comites, et Barones simul in unum, divitem et pauperem, ad coronacionem meam venire.

Qui autem venerint usque ad visitacionem Regis Anglie, qui unicuique juxta opera sua retribuet de hiis qui me coronant.

Si autem non consenserint, ignis succensus est in furore meo, et quem volo ut ardeat in omnibus habitaculis venire nolencium.

Ite, ecce mitto vos sicut lupo inter agnos.

Nolite portare sacculum neque peram, sed gladium atque hastam,

truth ye make me king over you, then come and obey the commands of my highness. But if ye will not, fire shall come out of the bramble and devour the cedars of Lebanon; ¹ that is,

Ye call me King and Lord: and ye say well; for so I am, the first-born son of my father, unto whom this kingdom was due by right of inheritance, but was given unto another by the Lord king of England.²

Wherefore, come unto me, all ye that neglect peace and love war (ye shall be forsworn and hanged): and I will refresh you with the blood of the slain, and of the captives, of the bared head of the enemy.³

And under the shadow which is the name of my Royal title, ye do go forth throughout all Scotland, to compel the bishops, abbots, earls, and barons, both rich and poor together, to come unto my coronation.⁴

And they that shall come [shall abide] until the day of visitation of the King of England, who shall render unto every man of them that crown me, according unto his works.⁵

But if they will not, a fire is kindled in mine anger; and what will I but that it burn in all the habitations of them that will not come? ⁶

Behold, I send you forth as wolves among lambs.⁷

Carry neither purse nor scrip, but sword and spear, and salute no

¹ Judges ix. 15, closer to the Vulgate.

² John xiii. 13.

³ Matt. xi. 28; Deut. xxii. 42 (Vulgate), *amicorum* in mistake for *inimicorum*.

⁴ Matt. xi. 16, and Ps. xlix. 2. ⁵ Possibly 1 Sam. xxvi. 23, and Rev. xxii. 12.

⁶ Jer. xv. 14; Luke xii. 49.

⁷ Luke x. 3.

neque quemque Anglicum potencior nobis per viam salutaveritis.

Adhuc eo loquente, venit quidam nobilis decurio Johannes Comyn, et ait, Non est nobis hereditas neque pax in Roberto, neque Regem nisi Cesarem, Regem Anglorum.

Cui alius in dolo est locutus, Amice, ad quod venisti? Assentire nobis et vive super terram, et eris deterior quam fuisti.

Cui Johannes Comyn, Et si oportuerit me mori Regem Anglie non negabo.

Tunc surrexerunt adversus eum duo falsi testes, dicentes, Audivimus eum prohibentem tributa dari nostro Regi, et contestari fidelitatem esse servandam Regi Anglie, a Galilea usque hic.

Quibus Robertus, Quid adhuc egemus testibus? Audivimus ex ore ejus blasphemiam.

Et evaginato pugione illum in ecclesia trucidavit.

Stulte, dixerunt, operatus es, dixerunt Fratres Minores, et quod non licet quemquam interficere in templo Dei.

Quibus ille, Sanguis ejus super me et super fratres meos, et benivolos meos semper.

Englishman by the way if he be stronger than ye.¹

And while he yet spake, a certain honourable counsellor, John Comyn, came, and saith: We have no inheritance nor peace in Robert, and no king but Caesar, King of the English.²

And the other spake unto him craftily [saying]: Friend, wherefore art thou come? Consent unto us, and live in the land, and thou shalt be worse than thou hast been.³

And John Comyn [said] unto him: Though I should die, yet will I not deny the king of England.⁴

Then arose against him two false witnesses, saying: We heard him forbidding to give tribute to our king, and bearing witness that faith should be kept unto the king of England, from Galilee to this place.⁵

Then Robert [saith] unto them: What further need have we of witnesses? We ourselves have heard the blasphemy out of his own mouth.⁶

And he drew his dagger, and slew him in the church.

The Friars Minors said unto him: Thou hast now done foolishly, for it is not lawful for us to put any man to death in the temple of God.⁷

And he answered them: His blood be on me and on my brethren and on my well-wishers for ever.⁸

¹ Luke x. 4. ² Luke xxii. 47; Mark xv. 43; 1 Sam. xx. 1; John xix. 15.

³ 2 Sam. iii. 27; Matt. xxvi. 50; Dan. xiii. 20 (Vulgate).

⁴ Matt. xxvi. 35. ⁵ Matt. xxvi. 60; Mark xiv. 58; Luke xxiii. 2, 5

⁶ Matt. xxvi. 65; Luke xxii. 71. ⁷ Gen. xxxi. 28; John xviii. 31.

⁸ Matt. xxvii. 25.

Sub illo tempore dixit Robertus Brus discipulis suis, Ecce, misi angelum meum Willelmum Waleys ante faciem vestram qui preparabit consimile vobis iter, nempe in regno Anglie elevabitur et sublimis erit valde.

Et ipsi nichil horum intellexerunt.

Qui dicunt illi, Edissere nobis hanc parabolam.

Numquid et vos cesi estis? Quinimo seducti et cesi eritis. Omnis enim qui se humiliat exaltabitur, et qui se exaltat humiliabitur.

Itaque post dies aliquot perigrinacionis Willelmi Waleys de Scotia auditum est quod tractus, suspensus, exinteratus, crematus, quatrifidatus et affixo capite super pontem London, et in Anglia est exaltatus.

Propterea dixit Symon Frisel, Impleta est scriptura, quoniam sic oportuit eum pati et intrare in ignominiam suam.

Sed vivat pseudo Rex noster, et vivat anima mea, quia vadam et tollam capud ejus, et affigam capud Anglici loco sui. Et sic auferam obprobrium gentis nostre.

Post hec fecit sibi Rex nequam currus et equites qui prederent eum in civitate qua coronandus esset ab

At that time, Robert Bruce said unto his disciples: Behold, I have sent my messenger William Wallace before your face, which shall prepare unto you a way like [unto his own], for he shall be very high and exalted in the kingdom of England.¹

And they understood none of these things.²

They say unto him: Declare unto us this parable (*Hiatus*).³

Are ye blind also? Yea, rather, led astray and blind shall ye be. For whosoever humbleth himself shall be exalted, and he that exalteth himself shall be abased.⁴

Therefore, when William Wallace was gone some days on his pilgrimage out of Scotland, word was brought again how that he was drawn, hung, bowelled, burned, and quartered, and his head was fastened up over London Bridge, and [thus] was he lifted up in England.

Simon Fraser therefore said: The Scripture is fulfilled, that thus it behoved him to suffer, and to enter into his shame.⁵

But as our sham king liveth, and as my soul liveth, I will go and take away his head, and put the head of an Englishman in his place, and so will I take away the reproach from our nation.⁶

After these things the evil king prepared him chariots and horsemen, to go before him in the city wherein

¹ Mal. iii. 1, quoted in Matt. xl. 10, &c.

² Matt. xv. 15.

³ Luke xxiv. 26.

⁴ Luke xviii. 34.

⁵ John ix. 40; Luke xiv. 11, *ceci* for *ceci*.

⁶ 1 Sam. xvii. 36 (Vulgate).

Anna et Caypha, sacerdotibus qui populum seducebant.

Et Abbate de Scone, Johanne Comite de Asceles, Simone Frisel, et fratribus suis uterinis et multis coronatus est a prophanis Episcopis Glasguensi et Sancti Andree primo, et tercio die postea Comitissa de Bowan, que transgressa maritali thoro exarserat in concupiscenciam fatui coronati, vocans eum Daffe.

Cumque domum redisset dixit uxori proprie, Heri vocabamur Comes et tu Comitissa; hodie vero Rex et Regina nominamur. Cui illa, Cave ne sicut fenum agri quod hodie est et cras in clibanum mittitur, sic effloreas, nequando propter usurpacionem regalis nominis perdas simul comitatum et regnum.

Nonne audisti, Quis Rex bellum commissurus adversus alium Regem, nonne prius sedens computat sibi occurrere cum viginti milibus si possit. Alioquin, adhuc longius eo agente, mittit legacionem, rogat ea que pacis sunt

Hoc fac et vives.

Sin autem forcior te supervenerit, auferet universa arma tua in quibus confidis, et spolia tua distribuet diripientibus ea valde velociter.

he should be crowned by Annas and Caiphas, the high-priests that deceived the people.¹

And [before] the Abbat of Scone, John Earl of Athol, Simon Fraser, and his brothers the sons of his mother, and many [more] was he crowned first by the abominable Bishops of Glasgow and St Andrews, and, the third day afterward, by the Countess of Buchan, who had transgressed against the bed of her husband, and burned with lust after the crowned fool, calling him "Daffy."

And when he was come home, he said unto his own wife: Yesterday we were called earl and countess, but this day we are named king and queen. And she [said] unto him: Take heed that thou flourish not as the grass of the field, which to-day is, and to-morrow is cast into the oven, but forasmuch as thou hast taken wrongfully the name of a king, thou lose the earldom and the kingdom together.²

Hast thou never heard, what king going to war against another king, sitteth not down first and consulteth whether he be able to meet him with twenty thousand? Or else, while the other is yet a great way off, he sendeth an ambassage, and desireth conditions of peace.³

This do, and thou shalt live.⁴

But if a stronger than thou shall come upon thee, he will take from thee all thine armour wherein thou trustest, and divide thy spoils among them that shall part them among them very speedily.⁵

¹ 1 Kings i. 5.

⁴ Luke x. 28.

² Matt. vi. 30.

⁵ Luke xi. 22.

³ Luke xiv. 31, 32.

Hiis sanis insane turbatus maritus
voluit eam gladiis trucidasse, sed pro-
hibitum est a dicentibus, Si fedaveris
manus tuas in sanguine mulieris in-
bellis, non poteris stare contra hostes
tuos in bellis.

Ab illo autem die muliti Scot
abierunt retrorsum, nec adherebant
deinceps secte sue. Itaque diviso
regno ejus confusio aproximavit, nam
gens surrexit contra gentem pro-
priam uno cum exercitu Anglicano.

Et conserto prelio, pseudo rex
senciens quod totum pondus prelii
versum est in eum, fugit ex acie,
populum suum in occisione gladii
derelinquens.

Testantur quidem hoc qui capti
fuerunt, videlicet, Thomas Randulf,
David Ynkemartyn, Johannes Somer-
vyle, milites, Hutting Marescallus
rexillifer illius Regis, et Hugo [pres]
biter sed prophanus, cum multis aliis.

Et data sententia, omnes bravium
suspendii acceperunt.

Sed Hugo presbiter ante alios pri-
mitus est suspensus, quasi diceret,
Ego presbiter vobis prebeo tale iter.

Ceteri vero cum sensissent crucis
tormentum, dicebant intra se, Hugwe
a diables.

In diebus illis dixit Rex Anglie

And her husband was troubled
madly with these sound words, and
he would have slain her with the
sword, but they forbade him, saying:
If thou defile thine hands in the
blood of this unwarlike woman, then
shalt thou not be able to stand up in
battle against thine enemies.

And from that day many of the
Scots went back, and clave no longer
unto his company; so that his
kingdom was divided, and confusion
came upon them, for a nation rose
against his own nation, together with
the English army.¹

And when they joined battle, the
sham king, knowing that the battle
went sore against him, fled out of the
field, and left his people unto the
slaughter of the sword.²

Unto this indeed do they bear
witness which were taken, that is to
say the knights, Thomas Randolf,
David Inchmartin, [and] John
Somerville, Hutting the marshal [and]
standard-bearer of the king, and Hew
the abominable priest, with many
others.

And when sentence was given upon
them, they all received the prize of
being hanged.³

But Hew the priest was hanged
first of all, before the others, as though
he said: I the priest do show this
way unto you.⁴

But when the others felt the torment
of the cross, they said within them-
selves: To the devil with Hew!

In those days, the King of England

¹ Matt. xii. 25; Luke xxi. 10.

² 2 Kings xxv. 6; 1 Cor. ix. 24.

³ 1 Sam. xxxi. 3.

⁴ Isa. lvii. 14.

principi Wallie, Proficiscere in Scociam et vindica despectum factum sancte ecclesie, es sanguinem Johannis Comyn et Anglicorum qui effusus est.

Ego vero prosequar iter tuum ; sicut fuerit voluntas in celo sic fiat.

Exiit ergo a Cesare Edwardo edictum ut describeretur universa milicia Anglicana, qua adunata, statim in Scociam profectus est.

Premittensque angelos suos de *Traylebastone*, id [est], Justiciarios, binos et binos ante faciem suam in omnem civitatem et locum ad quem erat ipse venturus, dicebat, Ecce, dedi vobis potestatem calcandi omnia membra diabolica. Homicidas occidite ; proditores distrahite ; perjuros suspendite ; non per con, sed per col. ; incendiarios comburite ; malos male perдите ; et meam vineam locate Anglicis agricolis, qui reddant vobis fructum temporibus suis. Non parcat oculus vester cuiquam magno vel parvo, signo Thau signatis duntaxat exceptis.

Illi autem abeuntes fecerunt sicut precepit illis Rex.

Et capti sunt infra duorum mensium spacium per inquisitiones juratorum hominum centeni et milleni

said unto the Prince of Wales : Go forth into Scotland and avenge the insult which is done unto the Holy Church and the blood of John Comyn and of the Englishman which is shed.¹

But I will follow after thee ; as the will in heaven shall be, so be it.²

Therefore there went out a decree from Caesar Edwardus, that all the militia of England should be enrolled, and when it was gathered together he set forth straightway unto Scotland.³

And he sent his angels of *Trailbaston*,⁴ which is to say, the justiciaries, two and two before his face into every city and place, whither he himself would come, saying : Behold, I give,⁵ unto you power to tread on all the limbs of the devil. Slay the manslaughterers ; draw the traitors ; hang the perjurers, not *per con.* but *per col.* ; burn the fire-raisers ; miserably destroy these wicked men, and let out my vineyard unto English husbandmen,⁶ which shall render you the fruits in their seasons. Let not your eye spare any, either great or small, save only them that are signed with the sign Tau.⁷

And they went, and did as the king comnanded them.⁸

And there were taken within the space of two months, by the verdicts of jurors, an thousand and one

¹ Ps. lxxix. 10.

² 1 Macc. iii. 60.

³ Luke ii. 1 (Vulgate).

⁴ See "The Outlaw's Song of *Traillebaston*," in French, in the Political Songs of England, from the reign of John to that of Edward II. Edited by Thomas Wright (Camden Society), 1839, 231. Also Langtoft's account of the same institution, *ib.* 319, and notes, *ib.* 283, 398.

⁵ Luke x. 1, 19.

⁶ Matt. xxi. 41.

⁷ St George's Cross ? Ezek. ix. 4, 5, 6 (Vulgate).

⁸ Matt. xxi. 6.

virī digni morte, velud fractores pacis regie, parricide, conspiratores pessimi, qui omnes palman patibuli meruerunt. Testimonium huic perhibet Nigellus de Bruys, miles et germanus pseudo Regis, adolescens pulcherrime iuventutis. Qui cum iudicaretur ad mortem dicebat, Sumus quidem quinque fratres. Utinam, testetur illis de me, ne et illi veniant in hunc locum tormentorum.

Tunc ait quidam de turba, Heliam vocat iste. Cui alius, Non, sed fratres suos. Sinite; si venerint fratres sui, eumque nunc liberent si velint.

Qui cum moram facerent in veniendo, per plateas de Berewyke tractus et suspensus est. Causa hujus quia, consenserat factionibus fratris sui.

Porro Johannes et Christoforus de Seytone, fratres, et hostiarii ecclesie dum perimeretur Johannes Comyn, distraccionis et suspendii beneficia condigne meritis sunt adepti.

Capitur autem et illa impia conjuratrix, Comitissa de Bowan, de qua consultus Rex ait, Quia gladio non percussit, gladio non peribit.

Sed propter coronacionem illicitam quam fecit, in corona ferrea ad modum domuncule fabricata firmissime obstratur, cujus latitudo et longitudo, summitas et profundum, octo pedum

hundred men guilty of death, as breakers of the peace of the king, murderers of fathers, most wicked plotters, who all earned the palm of the gibbet. Hereunto doth bear witness Nigel Bruce, a knight and a brother of the sham king, a young man of youth comely exceedingly. When he was judged unto death, he said: We are five brethren; would that it were testified unto them concerning me, lest they also come into this place of torment.¹

Then one of the multitude saith: This man calleth for Elias, and another [saith] unto him: Nay, but for his brethren. Let be, let us see whether his brethren will come and deliver him now, if they will have him.²

But, forasmuch as they tarried in coming, he was drawn through the streets of Berwick and hanged. His cause was that he had consented unto the conspiracy of his brother.

Moreover, John and Christopher Seton, brethren that kept the doors of the church while John Comyn was put to death, received the benefit of hanging whereof they were worthy.

And there is taken also that wicked conspiratrix, the Countess of Buchan, and when the king had taken council concerning her, he saith: Because she hath not smitten with the sword, she shall not perish with the sword.³

But on account of the unlawful crowning which she made, let her be kept most fastly in an iron crown, made after the fashion of a little house, whereof let the breadth and

¹ Luke xvi. 28.

² Matt. xxvii. 43, 47, 49.

³ Matt. xxvi. 52.

spacio concludatur. Et apud Berewike sub divo imperpetuum suspendatur, ut a pretereuntibus possit conspici, et agnosci pro qua fuerat causa illa. Que tunc assumpsit gemitum pro cantu, meditans ut columba, et ait, Similis facta sum pellicano solitudinis, nicticoraci in domicilio, et passeri solitario in tecto.

Post hec optulerunt Regi Episcopos et Abbatem qui coronaverant pseudo Regem. Quibus Anglie Rex, Vos estis de quibus lex vestra canit, Egresse est iniquitas a sacerdotibus Scocie qui videbantur populum regere.

Nonne vos estis qui apud Shene juxta London, tactis sacrosanctis Evangeliiis jurastis super corpus Domini, Sic Deus vos adjuvet et sancta Dei Evangelia, michi et succedentibus post me Regibus Anglie fidelitatem servare? Et pactum Domini irritum fecistis propter traditiones vestras!

Ypocrite! bene prophetavit de vobis Ysaia, Populus hic labiis me honorat, cor autem eorum longe est a me.

Respondete obsecro. In lege Domini de talibus quid scriptum est? Dixit Episcopus Sancti Andree, Virum injustum mala capient in interitu.

length, the height and the depth, be finished in the space of eight feet; and let her be hung up for ever at Berwick under the open sky, that all they that pass by may see her, and know for what cause she is there. Then did she take up groaning for singing, and did mourn as a dove, saying: I am like a pelican of the wilderness, I am like an owl in his hole, and as a sparrow alone upon the house top.¹

After these things, they brought unto the king the bishops and the abbat, who had crowned the sham king. The King of England saith unto them: Ye are of them of whom your law singeth, Iniquity is gone forth from the priests of Scotland, who seemed to rule the people.²

Are not ye they that did touch the Holy Gospels at Sheen, hard by London, and did swear upon the body of the Lord, so help you God and the Holy Gospels of God, to keep fealty unto me and unto the kings of England that shall come after me? Thus have ye made the covenant of the Lord of none effect by your tradition.³

Ye hypocrites, well did Esaias prophecy of you [saying], This people honoureth me with their lips, but their heart is far from me.⁴

Answer me, I pray you. What is written in the law of the Lord concerning such? The Bishop of St Andrews said: Evil shall hunt the violent man to overthrow him.⁵

¹ Is. xxxviii. 14; Ps. cii. 6, 7 (Vulgate).

² Matt. xv. 6.

⁴ Matt. xv. 7, 8.

³ Dan. xiii. 5 (Vulgate).

⁵ Ps. cxl. 12.

Et Rex Episcopo Glascuensi ait, Quomodo legis? Qui ait, Impietas impii super ipsum erit. Et Rex, Tu Abba, quid dicis? Respondit, Qui jamentum Christi violat, ipsum in adjutorium sui negat. Quibus Rex, Recte judicastis. Et ego despiciam quos hactenus spreuit Deus. Os enim condemnnavit vos, et non ego. Porro nunc non moriemini, quia portatis archam Domini, tonsura[m] capitis clericalem. Verumptamen quia sub capa pastoralis deprehenditur lorica militaris, immutato habitu quo induimini, ergastula introite quousque visitavit vos oriens ex alto, in [est], Summus Pontifex degradaverit vos ex facto.

Et factum est ita. In Anglia diversis carceribus mancipantur, sedentes in tenebris et umbra mortis, victi in mendicitate et ferro.

Saulus dum hec fierent, ad huc spirans minarum, id [est], Symon Frisel, petiit a pseudo Rex epistolas ut ubicumque inveniret Regis Anglie fideles vinciret et trucidaret. Ibat igitur Saulus, Simon, furia invectus, totoque pectore virus efflabat, et Anglorum sanguinem sine intermissione siciebat. Et cum iter faceret, contigit ut appropinquaret Lilietho. Et subito circumsepit eum Rex Anglorum. Et audivit vocem dicen-

And the king saith unto the Bishop of Glasgow: How readeest thou? and he said: The wickedness of the wicked shall be upon himself.¹ And the king said: Abbat, what sayest thou? He answered: Whoso breaketh the oath of Christ, refuseth Him for his helper. And the king said unto them: Ye have rightly judged. And I will despise them whom God hath rejected. For not I but your own mouth hath condemned you. Howbeit, now, ye shall not die, because ye bear the ark of the Lord, the shaven head of clerks. Nevertheless, forasmuch as the breastplate of the warrior is found under the cloak of the shepherd, the raiment wherewith ye are covered shall be changed, and enter ye into the prison-houses until the day-spring from on high shall visit you, that is, until the Supreme Pontiff shall actually degrade you.²

And it was so. They are put into divers prisons in England, sitting in darkness and in the shadow of death, being bound in affliction and iron.³

While these things were done, Saul, that is, Simon Fraser, yet breathing out threatenings, desired of the sham king letters, that wheresoever he found men faithful to the King of England he should bind them and put them to death. Therefore Saul-Simon went carried away with fury, and spat poison out of all his breast, and thirsted for the blood of Englishmen without ceasing. And as he journeyed, he came near Linlithgow. And suddenly

¹ Ezek. xviii. 20.

² Luke i. 78.

³ Ps. cvii. 10.

tem sibi, Saule, Simon, quid me persequeris? Quis es domine? At ille, Ego sum minister Regis Anglie quem tu persequeris infidelis. Durum erit tibi contra pavimentum natibus calcitrare. Et adductus ad judicem tremens ac stupens, dixit, Domine, quid me vis facere? Et judex ad eum, Simon, habeo aliquid tibi dicere, quod non [potes] portare modo. Scies autem postea. Qui cadens in terram nichil ridebat. Et judex ad eum, Surge et ingredere civitatem London, ac dicetur tibi quanta oporteat te pro nomine Regis pati. Ad manum autem illum trahentes introduxerunt castrum London.

Et cum apponeretur ei cibus, neque manducavit neque bibit, et ait, Tristis est amina mea usque ad mortem, mortem autem crucis.

Fatigatus est ex itinere cepit [cedere]. Oculi enim ejus erant gravati pre magna tristitia.

Erant autem ibidem plures alii Scoti, insignes viri, qui propter seditiones et homicidia carcere clau-

there came round about him the King of England. And he heard a voice saying unto him: Saul-Simon, why persecutest thou me? [And he said]: Who art thou, Lord? And he said: I am the servant of the King of England, whom thou unfaithfully persecutest; it will be hard for thee to kick against the pavement with thy buttocks. And he, when he was led before the judge, trembling and astonished, said: Lord, what wilt thou have me to do? And the judge said unto him: Simon, I have somewhat to say unto thee, but thou [canst not] bear it now, but thou shalt know hereafter. And he fell to the earth, and laughed not at all. And the judge said unto him: Arise, and go into the city of London, and it shall be told thee how great things thou must suffer for the king's name's sake. But they led him by the hand and brought him into the Castle of London.¹

And when meat was set before him, he neither did eat nor drink.² And saith: My soul is exceeding sorrowful unto death, even the death of the cross.³

[Simon therefore] being wearied with his journey, began [to be very heavy] for his eyes were heavy for sorrow.⁴

But there were there many other Scots, men of renown, that for sedition and murder were cast into prison,

¹ All from Acts ix. 1, 2, 3, 4, 5, 6, 8, 16, except part of the speech of the judge, which is from Luke vii. 40; John xvi. 12, xiii. 7. The *pavimentum natibus calcitrare* is a reference to being *drawn* through the streets to execution.

² Acts ix. 9.

³ Mark xiv. 34; Phil. ii. 8.

⁴ John iv. 6; Mark xiv. 38, 40; Luke xxii. 45.

bantur. Inter quos Thomas de Morham cum filio Hereberto et armigero suo Thoma de Roys, ferrejs compedi-bus nexi erant.

Et ait Thomas pater ad hospitem, Simon, dormis? Non potuisti una hora vigilare mecum?

Vigilate et plorate; cras intrabitis in dampnationem, tu et filius meus eum.

Et continuo gallus cantavit. Tunc recordatus est Herbertus verbi quod prius dixerat, In quocunque die captus fuerit Simon Frisel, capud meum Regi dono.

Et pater addens dixit, Si possibile est transeat a me calix iste. Spiritus quidem promptus est evadere, caro autem infirma.

Cui pater, Fili, non venisti facere voluntatem tuam sed ejus qui te misit. Lucescente autem die, ductus est Herebertus ad supplicium. Et clamavit post tergum armiger suus dicens, Quo progredieris sine patre fili? Quo miles nequicie sine ministro versucie proferas? Tu nunquam sacrilegium, homicidium, vel maleficium sine ministerio meo exercere consueveras. Qui ait illi, Veni et sequere me. Nam ego et tu morsque dividimur.

Exeuntes autem de castello processerunt vicum unum.

among the which was Thomas de Morham, with his son Herbert, and his squire Thomas de Roys, bound with fetters of iron.¹

And Thomas, the father, saith unto the new-comer: Simon, sleepest thou? Couldst not thou watch one hour with me?²

Watch and wail, [for] to-morrow ye shall enter into damnation, thou and my son Herbert with thee.³

And immediately the cock crew. Then Herbert remembered the word which he had said before: In what day soever Simon Fraser is taken, I give mine head to the king.⁴

And the father said moreover: If it be possible, let this cup pass from me. The spirit indeed is willing to escape, but the flesh is weak.⁵

His father saith unto him: Son, thou art come, not to do thine own will, but the will of him that sent thee.⁶ And when the day broke, Herbert was led to execution. And his squire cried after him, saying: Son, whither goest thou without thy father? Knight of wickedness, whither fareest thou without a squire of craftiness? It hath never been thy use to commit sacrilege, murder, or witchcraft without my ministry. And he saith unto him: Come, and follow me. For there is [but a step] between me and thee and death.⁷

And they went out, and passed on through one street.⁸

¹ Luke xxiii. 25.

² Mark xiv. 38; Matt. xxvi. 41.

³ Matt. xxvi. 39, 41.

⁷ Matt. xix. 21; 1 Sam. xx. 3.

² Mark xiv. 37.

⁴ Matt. xxvi. 74, 75.

⁵ John vi. 38.

⁶ Acts xii. 10.

Quo, sub divo, decollato milite, decapitatus armiger sequebatur eum. Et nesciebant quia verum est quod fiebat per Anglicum. Oculi enim eorum velabantur ne quemque agnoscerent.

Hoc autem totum factum est ut impleretur scriptura, Ego dixi, in dimidio dierum meorum vadam ad portas inferi, nec aspiciam hominem ultra in terra viventium.

Et planxerunt speciem decoris illius omnes qui noverant eum ab heri et nudius tertius, quia in tota Scotia non erat vir ita pulcher sicuti Herbertus. A planta enim pedis usque ad verticem non erat in eo macula. Ab humero et sursum eminebat super populum.

Planxit autem pater filium suum, dicens, Quis mihi det ut pro te moriar, fili mi Herberte?

Addiditque pro filio et pro servo, Ecce quomodo dilexerunt se in vita sua, ita et in morte non poterant separari.

Tunc conversus iudex ad Simonem Frisel dixit, Tu es qui sepius turbasti regna Regis Anglie. Quomodo et quociens Rex Anglie dimisit te liberum ut cum iusticia permaneres

And when the soldier had been beheaded there in the open air, his squire followed him, headless also. And they wist not that it was true which was done by the Englishman, for their eyes were holden that they should not know any man.¹

Now, all this was done that the scripture might be fulfilled, which saith: I said, in the midst of my days, I shall go to the gates of the grave: I shall behold man no more in the land of the living.²

And all they that had known him yesterday and the day before, mourned for the perfection of his beauty: for in all Scotland there was none to be so much praised as Herbert for his beauty; from the sole of his foot even to the crown of his head there was no blemish in him; from his shoulders and upward he was higher than any of the people.³

And the father mourned for his son, saying: Would God I had died for thee, O Herbert [my son], my son!⁴

And he said, moreover, for his son and for his servant: Behold how they loved one another in their lives, and in their death they could not be divided.⁵

Then the judge turned unto Simon Fraser, and said: Thou art he that hast oftentimes troubled the kingdoms of the King of England. How and how many times hath the King of

¹ Acts xii. 9; Luke xxiv. 16, *velabantur*, viz., blindfolded at the block.

² Is. xxxviii. 10, 11.

³ Ps. l. 2; 2 Sam. xiv. 25; 1 Sam. ix. 2.

⁴ 2 Sam. xviii. 33. The brutality of this is quite startling.

⁵ 2 Sam. i. 23. Commem. of SS. Peter and Paul in Breviary.

et viveres super terram. Jamque pejora peioribus cumulasti; comprehenderunt te iniquitates tue et mala que operatus es ab adolescentia tua usque in presens. Ne poteris amplius villicare, sed itaque judicaris. Primo, per longitudinem civitatis traheris; deinde in patibulo alcius exaltaberis; postea in decisione capitis spiritum exalcobis; truncus cremabitur, et capud tuum juxta capud Willelmi Waleys quod vovisti furatum fuisse affixo ibi capite Anglici pro eodem, super lanceam fixum erit. Et sic discas alias reddere vota tua.

Hoc autem totum factum est ut impleretur scriptura, Dentem pro dente, suspensionem pro suspendio, adustionem pro adustione, capud pro capite luet homo.

Hec dum complentur in London, conscius ipse sibi Johannes Comes de Asseilla quod de similibus simile fieret judicium fugam querit, sed fugiendo captus est. Comes autem iste de regali sanguine sibi originem vendicavit. Et hesitantibus nonnullis quid de ipso fieret, et quod ve quale subiret judicium, respondit Rex, Si disceptatis pro sanguine, Psalmus vos instruit; Virum sanguinum et dolosum abhominabit Dominus.

England let thee go free, that thou mightest abide in righteousness and dwell in the land? And now hast thou added worse unto worse; thine iniquities have taken hold upon thee, and the evil which thou hast done from thy youth up until now. Thou mayest be no longer steward, but thus thou art judged. First, thou shalt be drawn through the length of the city; then thou shalt be highly exalted upon the gallows; afterward thou shalt give up the ghost in the cutting off of thine head, thy body shall be burned, and thine head shall be set up upon a lance beside the head of William Wallace, which thou didst swear to steal away, and to set the head of an Englishman in his place. And thus do thou learn otherwise to perform thy vows.

Now all this was done that the scripture might be fulfilled: Tooth for tooth, hanging for hanging, burning for burning, head for head shall a man render.¹

While these things are being fulfilled in London, John Earl of Athole, knowing that like judgment was for like things, seeketh flight, but in flying he was taken. Now, that Earl claimed that he was sprung of king's blood. And when some doubted what should be done unto him, and what judgment or of what kind he should undergo, the king answered: If ye dispute among yourselves concerning blood, the Psalm doth you to wit—The Lord will abhor the bloody and deceitful man.²

¹ Exod. xxi. 24, 25.

² Ps. v. 6.

Et ait, Quanto gradus alcior tanto lapsus gravior. Non sanguinis lineam set justitie judicium attendite. Qui alios parricidas superexcesserit in sanguine, alcius felonibus pro scelere suspendatur. Item et ducite eum cante usque London, ut videat si cuncta sint prospera circa falsos fratres, et renuncia michi quid agatur. Quo cum pervenisset et in Turri falsis Scotis valediceret, dicunt illi, Heri venisti, et hodie compelleres subire tormentum. Qui ait, Sine modo : Sic enim oportet me luere omnem iniquitatem quam perpetravi. Tunc conversus iudex ad eum dixit, Et si omnes Scoti conspiraverunt contra Regem Anglorum, velis nolis et Scotorum sed non tu, suple si gratus esses eo quod nacione Anglicus es, et¹ ex regali sanguine vendicas procreatus. Hoc est ergo in quo non es justificatus ; Anglicos, Scoticos, Regis ministros, jugulasti, incendiasti quin immo Regem quatenus in te est.¹ Quociens prodidisti in Flandria, in Anglia, et in Scocia ? Suscipe ergo bravium cursus tui ; sed regali sanguini tribuemus reverenciam et honorem. Non enim traheis per urbem, sed ascenso equo, ne forte offendas ad lapidem pedem tuum, levaberis in patibulum. Demissus decollaberis ; azephalum corpus tuum vorax incendium adnichilabit, et capud tuum medium inter duorum proditorum capita altrinsecus defixum, quasi de regali sanguine, pontem Londinie decorabit ; Si quando venerint Greci vel Barbari, Cretes

And he saith : By so much as the place is higher, so much is the fall heavier. Regard not ye the line of blood, but the judgment of justice. He that hath exceeded in blood more than the other murderers of fathers, let him be hanged for his foul deed higher than the felons. Wherefore also lead him carefully unto London, that he may see whether all things be well with the false brethren, and bring me word again what is done. Whither when he was come and bade farewell unto the false Scots in the Tower, they say unto him : Yesterday thou art come hither, and to-day thou shalt be constrained to undergo the torment. He saith : Suffer it to be so now ; for thus it behoveth me to wash away all the iniquity which I have committed.² Then the judge turned unto him and said : Although all the Scots should conspire against the king of the English (and, will thou, nill thou, of the Scots also), yet shouldst not thou forasmuch as thou art an Englishman by nation, and claimest that thou art born of kingly blood. Hereby, therefore thou art not justified ; thou hast slain [and] burned the king's servants, Englishmen [and] Scotchmen ; yea, moreover, the king himself, as far as lay in thee, how often hast thou betrayed, in Flanders, in England, and in Scotland ? Receive thou therefore the prize of thy running ; but unto the kingly blood we will pay worship and honour ; for thou shalt not be drawn through the city, but thou shalt ride upon an horse,

¹ The punctuation is here evidently wrong.

² Matt. iii. 15.

te Arabes, Romani vel Yspani,
 Franci vel Angli, Scoti vel Picti, de
 quibus omnibus London, est con-
 cursus, et furentur capud tuum, et
 dicant plebi, Surrexit a mortuis.

Hoc autem totum factum est ut
 impleretur scriptura, Sicut fecit
 gladius tuus mulieres absque liberis,
 sic erit mater tua absque filio inter
 mulieres hodie.

Post hoc accessit ad Regem quidam
 Scotus, Doncanus nomine, offerens ei
 sex viros in certamine deprehensos, et
 ait, Domine, hii peccatores evagin-
 averunt gladium, intenderunt arcum,
 ut depopularent terram tuam, et
 trucidarent si resisterent rectos corde.

Quibus ego occurrens cum trecentis
 non multo eo amplius peremi ex eis
 septingentos viros, hos in acie, hos
 in fuga, hos in saltu, hos in portu,
 et plures consepulti sunt in ponto.
 Istos reservavi ut in quo voluntas
 regia de hiis decreverit faciendum.
 Respondit Rex, Gladuis intret per

lest haply thou dash thy foot against
 a stone, [and so] shalt thou be lifted
 up upon the gallows. Thou shalt
 be let down and beheaded, and the
 devouring fire shall consume thine
 headless trunk to nothing, and thine
 head shall be set up in the midst
 between the heads of the two traitors,
 higher than they, as being of kingly
 blood, and shall adorn London Bridge,
 lest Greeks or Barbarians, Cretans
 and Arabians, Romans or Spaniards,
 Frenchmen or Englishmen, Scots or
 Picts, whereof all do flow unto Lon-
 don, should come and steal away
 thine head, and should say unto
 the people: He is risen from the
 dead.

Now all this was done that the
 scripture might be fulfilled: As thy
 sword hath made women childless, so
 shall thy mother be this day childless
 among women.¹

After this a certain Scot named
 Duncan drew near unto the king, to
 offer unto him six men whom he had
 taken in battle, and he saith: Lord,
 these wicked ones drew the sword
 [and] bent their bow, that they might
 waste thy land and slay the upright
 in heart, if so be they should withstand
 them.²

But I went to meet them with not
 much more than three hundred men,
 and destroyed seventy of them, some
 in the battle and some in the flight,
 some in the thicket, and some in the
 port, and many of them wereswallowed
 up together in the sea. These have I
 kept as that wherein should be done

¹ 1 Sam. xv. 33.

² Ps. xi. 2.

colla eorum, et arcus eorum petencie confringatur. Qui protinus justiciariis liberantur. Quorum nomina hec fuerunt; Alexander de Bruys, Decanus ecclesie Glascuensis, germanus pseudo Regia, Reginaldus de Craunforde, Malcolmus Makayle, dominus de Kentir, qui apud Kar[e]-eolum dampnabantur, et Thomas de Bruys, qui tractus et suspensus ac decapitatus est, relicto corpore super furcas, si forte veniret Joseph ab Arimathia ac tolleret et sepeliret illud. Reliqui simpliciter suspenduntur et per accidens decollantur. Tunc conversus iudex ad Alexandrum de Bruys dixit, Tu quis es? Respondit, Membrum et Decanus. . . .

whatsoever the king's will shall command concerning them. Then the king answered: Let the sword enter into their necks, and let the bow of their strength be broken. And forthwith they were delivered unto the Justiciaries. Now these were their names—Alexander Bruce, Dean of the Church of Glasgow, brother of the sham king; Reginald Crauford; Malcolm Makayle, Lord of Cantire, who were condemned at Carlisle; and Thomas Bruce, who was drawn, and hanged, and beheaded, and his body was left upon the gibbet [to see] if haply Joseph of Arimathea would come and take him and bury him. The rest are hanged plainly, and beheaded as it were by the way. Then the judge turned him unto Alexander Bruce, and said: Who art thou? and he answered: [I am] a member and dean

Here apparently two leaves are wanting, and the chronicle is then resumed.

There can be no doubt that the broken sentence at the end—" [I am] a member and Dean"—must have continued "of the Cathedral chapter of Glasgow," or some similar phrase.

If it is really to be regretted that any more of this stuff is lost to us, it is certainly at this point, for if we had a continuation, it would probably have contained some further information beyond what is now known to exist, upon the executions which took place at Ayr, in which Brice Blair suffered, and upon which Blind Harry has founded one of the most inaccurate, but also one of the most popular incidents of his romance. As it is, the matter in question remains, as far as this composition goes, as much in the dark as ever. It may be observed, however, that if there are really only two leaves missing, the amount of this parody which is

lost (if indeed it be not an unfinished fragment), cannot be great, since the last event mentioned in the portion of the chronicle which precedes it is the affair of Stanhope-park in Aug. 1327, and the portion which follows it recommences in the midst of the description of the battle of Halidon Hill, July 19, 1333.

As regards the date of this composition, it seems to me that it is possible to arrive at a pretty certain and exact conclusion. The last event which it mentions, at least as we now have it, is the execution of Thomas and Alexander Bruce and Reginald Crauford. That event, of which we have a close and exact notice in the *Lanercost Chronicle*, took place at Carlisle on Feb. 17, 1307. This parody therefore cannot be earlier than that date. On the other hand, it seems to me that Edward I. would hardly have been written about after his death in the sort of playful tone here adopted. He died at Burgh-on-the-Sands, July 7, 1307. If my impression is just, it must therefore have been written before that time. But I think I can detect a still closer indication. The whole tone is one of perfect, untroubled, and indeed insolent security. Now, King Robert returned from Ireland after Easter, which fell on March 26, and soon after defeated first Aymer de Vallance, and then the Earl of Gloucester, whom he besieged in Ayr. But there was an earlier event than this, which marked the turning of the tide of affairs. This was what is commonly known as the Douglas Larder, which took place on Sunday, March 19. I therefore conjecture that the composition before us must have been drawn up before that event. If so, we are thrown into the 2nd, 3rd, 4th and 5th weeks of Lent, and the tone of the religious services of the period certainly seems a sufficiently probable explanation of the peculiar form of this profane skit.

I am of course quite aware, that it may be argued against this that the *Extracta e variis Cronicis Scotie* state Simon Fraser to have been taken prisoner only on the 25th of March, but I feel compelled by all the other authorities which I have consulted to reject that date. My impression is that the date in the *extract*, viz., *Annunciacionis Dominice* may have been caused by a copyist's blunder for *Assumptionis*, which would suit that of the execution, and is fairly accordant with the distinct

statement of a MS. quoted in Nicolas' *Carlaverock*, 218, that he was captured on the Friday before the Assumption, viz., Aug. 12, 1306. The execution took place, Sept. 7, 1306 (Matthew of Westminster).

As regards the authorship, it can only be remarked that it was written by some one who was intimately acquainted with the course of affairs, and most probably living in Carlisle or the neighbourhood at the time. The object of the work is a more curious subject. It was evidently written for the amusement of some one who was extremely familiar with the Latin language, and also with the Bible,—in other words, in high social position. Whoever it was, he was also a person of singular brutality and cruelty of disposition, the lowest possible taste, and a turn for pleasantry of a very degraded and degrading kind. This consideration is quite enough to render it out of the question that this wretched stuff was prepared to please the great Edward. It is true that an exclamation of this kind, coupled with a very profane oath, is attributed to him by Walsingham (*Historia Anglicana*, sub anno 1300), but the statement is hardly reconcilable with the letter of the Archbishop of Canterbury describing the very scene (Prynne's *History of the Pope's Usurpations*, iii. 882, 883); and even if it were true, it is a very different thing to a piece of sustained and cold-blooded profanity like the *Passio*. I hope I may not be wronging the memory of his unworthy son, if I express the idea that a conjecture in that direction would not be an improbable one.

The most curious circumstance with regard to this composition is that it is several times quoted in the penultimate chapter of Matthew of Westminster. It does not seem to me that this admits of the least doubt. The first passage is this :—

quæ transgressa maritali thoro, exarsert in [speciem et] concupiscentiam fatui coronati. [Et mutavit nomen ejus impositum in baptismate], nominans illam David. Cumque domum redisset, fertur uxori suæ dixisse: Heri vocabamur ego Comes et tu Comitissa, hodie vero ego rex et tu regina vocamur. Cui illa : [Timeo quod rex

who had transgressed against the bed of her husband, and burnt for the beauty and lust of the crowned fool, and changed the name that had been given him in baptism, calling him David. And when he was come home, he is said to have said unto his own wife: Yesterday we were called Earl and Countess, but this day we

œstivalis sis, forsitan hyemalis not eris.] Timeo autem ne tanquam flos agri, qui hodie est, et cras in clibanum mittitur, sic effloreas, ac ne pro perjurio fidei, per vocabulum regium, Comitatum simul perdas et regnum, Qui se irrisum à muliere existimans, voluit eam gladio peremisse.

are called King and Queen. And she said unto him : I fear me that thou art a summer king, perchance thou shalt not be a winter one. But I fear lest thou flourish as the grass of the field, which to-day is, and to-morrow is cast into the oven, and lest for thy perjured faith, by the name of king thou lose the earldom and the kingdom together. And thinking himself mocked of a woman, he would have destroyed her with the sword.

From this comparatively respectable edition, it may be conjectured that when the Countess of Buchan crowned Robert, the second time, at Scone, on March 27, 1306, she probably made, and not unnaturally, some speech in which she compared his crowning to the crowning of David in Hebron. That this was so, is the more probable, because Matthew of Westminster, a few sentences before, goes out of his way, as though for the sake of protest, to compare the ceremony to the crowning of Adonijah. I imagine the parodist to have got hold of the fact, and altered David into "Daffy," for the sake of calling him the crowned idiot. What is really rather amusing is that, through the perfidy of Matthew of Westminster, no less venerable and pious a writer than Dr Lingard is made to figure in the train of this foul jester. "When his wife," says Lingard, "was informed of the coronation, she ventured to express a hope that he, who was a king in summer, might not prove an exile in winter." Lord Hailes, with his usual acumen, saw that the story was fabulous, but he did not know where to look for the original fable, which I have now the honour of laying before you.

The following passages also appear to me to be clearly quotations :—

Execution after the Rout of Methven.

In prœlio autem supradicto capti sunt hi viri, Thomas filius Ranulphi, David Inkemartyn, Johannes de Sumervile, milites Hutting Marescallus et vexillifer pseudo regis, et Hugo capellanus. Qui nihilominus, cum predictis, et cum multis aliis, quorum nomina hic non necitantur ne pagina his vilescat, patibulo ante cæteros prinutus est affixus, quasi diceret : Ego presbyter tale vobis præbeo iter.

Nigel Bruce's Execution.

Nigellus de Brus, miles pulcherrimæ juentutis, pro eo quod consenserat factionibus fratris sui, et cæteri qui cum eo capti fuerant tracti sunt atque suspensi, et ultimo decollati.

The Countess of Buchan.

Capitur etiam et illa impiissima conjuratrix de Bowhan, de qua consultus rex, ait : Quia gladio non percussit, gladio non peribit. Verum propter illicitam coronacionem quam fecit, in domicilio lapideo et ferreo, in modum corone fabricato, firmissime obstruatur, et apud Bervicum sub dio forinsecus suspendatur, ut sit data, in vita et post mortem, speculum viatoribus et opprobrium sempiternum.

The Dress of the Bishops.

Isti ergo perjurati Prælati in arctissimis carceribus, forma et habitu quibus fugiendo capti fuerant, retruduntur, quousque per Apostolicam sedem dispositum eit, quid de his fuerit faciendum.

The Wager of Herbert de Morham.

Quidam Scoticus miles, in Turri Londinensi vinculatus caput proprium regi dedit, quocunque die captus fuerit [Symon Freysel], amputandum. Nomen autem hujus Herebertus de Norham Posthæc Symon Freysel ad Turrim Londinensem mittebatur, ut illo viso, voti præstiti Scotus alius recordaretur.

Execution of Simon Fraser.

Sic damnatur. A Turri Londinensi per viculos et plateas distractus ut proditor, suspensus eminus quia latro, truncatus capite ut homicida, refixus equuleo per dies 20, igne quoque finaliter est combustus. Hujus autem caput super pontem Londinensem juxta caput Gulihelmi Waleis super lanceam est affixum.

Execution of the Earl of Athole.

Comes autem iste de stripe regali sibi originem vindicavit. Idcirco quidam Palatini, ipsum cum iniquis judicandum indecens indecorumque censebant. Quibus rex non sanguinis lineam sed justitiæ judicium attendens, dicebat : Quanto gradus altior, tanto lapsus gravior esse constat. Sed cæteris parricidis generosior in sanguine, altius cæteris suspendatur pro scelere. Nec vos latet quoties voluit prodidiisse nos in Angliâ, in Scotiâ, et in Flandriâ. Habete

illum vos ut Londini justissime judicetur. Quo cum pervenisset quia de regali sanguine fuerat oriundus, non est tractus, sed ascenso equo, in equuleo quinquagina pedum suspensus est. Postea semivivus demissus ut majores cruciatus [sustineret], crudelissime decollatur. Truncus vero illius, præaccenso in conspectu ejus vehementi igne, una cum carne et ossibus, in favillas et cineres, funditus conflagrantur. Caput autem istius, inter alia proditorum capita, super pontem Londin, in superlativo gradu, quia de regali stemmate, est affixum.

It may, of course, be suggested that the parody was based on Matthew of Westminster, and not *vice versa*. There are, however, several circumstances which point pretty clearly in the opposite direction, although they may not perhaps be regarded as absolutely conclusive.

(a) The consideration already proposed for fixing the time and place of the composition of the parody.

(b) The speech attributed to the King of Scots is distinctly marked by Matthew of Westminster as a quotation—"fertur dixisse," not "dixit."

(c) The language is actually appropriated, but slightly pared or modified, so as to lose the character of profanity.

(d) There are facts in the parody, such as the details of the shape of the cage, or the execution of the Bruces and Crawford at Carlisle, which could not have been got from Matthew of Westminster.

(e) Matthew of Westminster, in adding, makes at least one mistake, viz., the Queen of Scots having been sent by her husband to her father.

(f) The scriptural quotations found in both are certainly at home in the parody and very awkward in the history, and the same may be said about the remark as to Hew the chaplain.

(g) In the parody the sequence of the events is taken very much at haphazard; in the history there is an attempt to arrange them chronologically. If the parody had been taken from the history, it would seem more probable that the sequence in the history would have been followed.

(h) The present tense, as regards the imprisonment of the Bishops and Abbat, who were released in 1314.

Lord Hailes and Dr Lingard both decried the notion that the Countess of Buchan was hung up to public view in a cage outside the walls of Berwick Castle, although, after the description by Matthew of Westminster, such doubts certainly seem rather astonishing. That it was so, was clear enough from other sources; but if the least doubt could have remained, it will be removed by the minute description here given.

The mention of Sheen as the place where the Bishops and Abbat had taken the oath of fealty is certainly very singular. There is in Palgrave a long account of the repeated swearing of fealty to King Edward by both the bishops, but it never appears to have been at Sheen. Under the circumstances, it may be suggested that the present state of the text is due to the error of a copyist, possibly writing to dictation. In this case the words "prope London," may be regarded as a gloss, and "apud Sheen" as occupying the place of some such word as "scēpissime."

The name of Thomas de Roys is evidently also a copyist's error for de Boys, which is given correctly in Matthew of Westminster, who, on the other hand, at least in the common text, has de Norham by mistake for de Morham. The history of these persons could no doubt be much illustrated by farther investigation, but it is needless here to go into a biographical study. The following notes, however, which were the first that occurred to me, are perhaps not without interest:—

On June 29, 1294, King Edward summoned Thomas de Morham and others to be in London on the ensuing Sept. 1 (*Rymer*, ii. 643, 644).

Sir Thomas Morham, then called King Edward's enemy, was brought before him at Aberdeen, in the middle of July 1296 (*Stevenson's Historical Documents*, ii. 29), but he evidently submitted, and was pardoned, for Thomas de Boys, and Thomas de Morham, both swore fealty to King Edward at Berwick on Aug. 28, the same year (*Ragman Roll*, 134, 142).

On Oct. 12, 1297, we have the mandate of the king, committing him to the custody of the constable of the Tower (*H. D.*, ii. 235).

His son Herbert was captured in arms at Dunbar at the end of April 1296 (*H. D.*, ii. 50), and was in prison in Rockingham Castle at least till April 14, 1297.

On July 30, in that year, he was released, on condition of going to France, his sureties being John Comyn of Badenoch and David Graham (*Rymer*, ii. 775, 776); but it is possible that he only returned to Scotland, and threw himself into the arms of the Nationalist party. At least on Oct. 25, 1299, the Countess of Fife declares that he had devastated her property to such an extent that she could not meet her debts (*H. D.*, ii. 399, 400).

In Sept. 1301 he was, with Simon Fraser and others, close to the south-west borders, and seems to have joined in the attack on Lochmaben on Sept. 7 (*H. D.*, ii. 431-435).

He was a prisoner before Feb. 20, 1304, for on that day he and his father were specially excepted in a proposal for an exchange of prisoners of war (*Palgrave's Documents and Records*, 281).

But Thomas de Boys was still uncaptured at that date, as he is one of the four persons excepted from the proposed terms of peace, the others being the High Steward, John de Soules, and Simon Fraser. He is similarly excepted, along with Simon Fraser and David Graham, in a similar but undated document about the same time (*Palgrave*, 278).

It thus appears that Herbert de Morham had been a prisoner for at least two years and a half before his execution, and it is impossible but to suppose that it was not originally intended to put him to death, but that he was sacrificed to the anger which clouded the end of King Edward's career. It is a pleasure to think that his father, Thomas de Morham, lived to see his native land once more. There can be little doubt that he is the person called in the printed *Fœdera* (*Rymer*, ed. 1727, iii. 501, 502), Thomas de Morrain, who was released from the Tower by an order of Nov. 20, 1314, that he might be returned to Scotland and liberated. There are grounds for hoping that his declining years were soothed by the affection of a daughter, Eufemia, married to John Gyffard, and by the presence of a grandchild, Hew Gyffard, her son (*Liber Cartarum S. Crucis*, 92). He was dead before Aug. 16, 1327, when he is mentioned with respectful gratitude by William, Bishop of St Andrews, as a deceased benefactor of that church (*Liber Cartarum S. Crucis*, 78, 79).

The speech put in the mouth of Thomas de Boys, as addressed to

Herbert de Morham, is not from Scripture, but from a portion (i. 41) of St Ambrose's Book on Offices, which is used in the Breviary on Aug. 13, and relates that when St Lawrence saw St Xystos being led to execution, he said to him—

Quo progredieris sine filio, pater?
quo, sacerdos sancte, sine Diacono
properas? Nunquam sacrificium sine
ministro offerre consueveras.

Father, whither goest thou without
thy son? Holy Priest, whither dost
thou fare without a Deacon? It hath
never been thine use to offer sacrifice
without a minister.

II.

NOTICE OF AN ARTIFICIAL MOUND OR CAIRN SITUATED 50 YARDS
WITHIN THE TIDAL AREA ON THE SHORE OF THE ISLAND OF
ERISKA, ARGYLLSHIRE. BY ROBERT MUNRO, M. A., M. D., F. S. A. Scot.

During the autumn of last year, J. Meliss Stuart, Esq., of the Royal Highland Yacht Club, Oban, forwarded to me some correspondence he had with Dr Joseph Anderson regarding a supposed burial-cairn which had been discovered on the shore of the island of Eriska. This island is situated just at the entrance to Loch Creran, opposite the upper third of the very elongated island of Lismore. On its south side it is separated from the mainland by a small firth, the entire bed of which is laid bare for several hours during low water. At the west end of this firth, where it joins the open sea, glaciated rocks of Lower Silurian clays protrude, and the water channel is so narrow that it could be easily spanned by a light iron bridge—a project which Mr Stuart contemplates carrying out. As we move eastwards, this semi-aquatic firth widens out a little, and again contracts, forming a miniature bay, before curving round to join Loch Creran, which bounds the island on its west side. About half-way along this narrow firth, but considerably nearer the island shore than the opposite mainland, Mr Stuart's attention was directed to a low, circularly-shaped mound of stones and clay, which appeared to be artificial; and upon making some tentative digging, this opinion was confirmed by the discovery of bits of charcoal, burnt bones, and one or two large logs of wood, which were turned up from its interior. Mr

Stuart at once communicated these facts to the Secretary of the Society of Antiquaries of Scotland. The extreme novelty, if not improbability, of a burial-cairn being found in such a locality, led Dr Anderson to support the hypothesis, already broached elsewhere, that it might be a lake-dwelling, and he suggested that I might be asked to see it. Hence the origin of my relation with this interesting discovery. Accordingly, I started for Oban on the 17th September 1884, and on the following day accompanied Mr Stuart to the site of the mound. I may mention that on the island of Eriska, which had recently passed into the hands of Mr Stuart by purchase, he was building a mansion house, and consequently he had occasion to be a frequent visitor to the locality. Our route was by Connel Ferry, thence past the site of the lake-dwelling at Ledaig, the great cairn of Auchnacree (both of which have been explored and described by the late Dr Angus Smith), and the far-famed natural stronghold of Dun Mac Uisneachan, on the top of which the remains of a vitrified fort are still to be seen. Upon arriving at the island of Eriska, we were met by Mr Stuart's manager, Mr George M'Kenzie, and some half dozen men, who were in readiness to make any excavations that might be considered desirable. The mound is most accessible from the nearest point of the tidal limits on the island, from which it is 50 yards distant, and about double that distance from the opposite shore on the mainland. On its west side, after the tide retreated, there remained some stagnant water, which has got the name *Poll an Rín* (the seal's pool), and on its south and east sides the water-bed is somewhat lower than that which intervenes between it and the north shore of the island. During the previous investigations a trench had been cut half-way into the mound, running from north to south, from which two large logs of soft wood had been dug out, bearing marks of some sharp cutting implements, and one or two deep cuts as if made by a cross-cut saw. On inspecting the sections exposed by this trench, nothing could be made out as to the structure of the mound, as the sides and bottom of the trench had become smeared over with a thick layer of slime and sea mud. Before the extracted logs had been disturbed, they lay horizontally and pointing towards the centre of the mound, but at its outer margin we observed that others ran along the circumference. Further

digging showed that a wooden basement, formed of one or two lines of trunks laid along the margin, from which others ran inwards at right angles to the former, like the spokes of a cart wheel, extended beneath the entire mound. Above this wooden structure were stones and clay, rising from about a foot at the circumference to nearly 3 feet in the centre. The depth of woodwork was not more than the thickness of one layer of beams, but towards the centre brushwood was mixed up with the beams, and the whole structure appeared to have been originally placed on the littoral deposits, as on digging below the wood a soft clayey substance was turned up similar to that of the surrounding seabed. The original trench was then continued right across the mound, and in several places, about 6 inches below the surface, ashes, charcoal, and a few small fragments of burnt bone were met with. While digging at the western margin of the mound, merely to corroborate the inference that the wooden basement was coextensive with its area, a quantity of broken bones, apparently of the sheep and small ox, were found along with ashes imbedded some 2 feet below the surface and immediately outside the wood. The average diameter of the mound, measuring from the outside of the woodwork, was 60 feet; and at spring tide the water covered it to a depth of about 5 feet. No stone implements, or other relics of man, beyond the charcoal and animal bones already noticed, were found.

At this stage I considered it imprudent to advise any further excavations until such time as antiquaries would have an opportunity of having their attention directed to the unusual position and character of this structure. Moreover, when Mr Stuart comes to reside on the island, which he expects to do next summer, such further investigations would have the advantage of his own careful supervision. Meantime Mr George M'Kenzie, whose intelligence in superintending the day's work was only equalled by the anxiety he displayed in ascertaining the archæological value of the discovery, thus writes in answer to a request to ascertain if there are any oral traditions floating among the natives regarding the island and its connection with the mainland :—

ERISKA, APPIN, *October 3, 1884.*

There is an old story current here that a man who stole cattle off the island was shot on the spot (site of cairn) by the owner of the island while standing on the hill towards the Ferry, or rather east from the cairn, which must have been quite 500 yards distant. It is not said whether the cairn was there at the time or not. It is said the name of the robber was Thick Sandy, and people thought he was buried in the mound. There was a road or ford about 20 yards east of the cairn, and this was the only safe place for horses to pass at low water. My impression is that at one time the cairn was not surrounded by water, but that there was a narrow channel between the mound and the mainland, and that it was of late date the bay on the island side was formed by strong currents.

The name of the firth on the Ordnance Map is "Doirlinn," which suggests the existence of a pool of some kind. That a stagnant marsh existed here in former times, sufficient to afford protection for a fort or crannog, before the sea encroached upon it to the extent it now does is probable. This might be determined by digging through the sea-silted bed to ascertain if the stuff below consists of mossy deposits.

Though the result of this investigation is, so far, of a negative character, I do not think a record of what has already been done, should, for this reason, be less acceptable to the members of this Society, more especially as it opens up problems in which geologists as well as archaeologists may find some points of common interest. That considerable changes in the aspect of this country—such as the deepening of river channels, the filling up of lake basins, and especially alterations in its littoral borders, by partial subsidences or upheavals of land, and the action of the waves in denuding here and depositing there—have taken place within historical times, is at least rendered probable by many recorded facts.

While the discovery of the Culzean bronze hatchets,¹ beneath a bed of littoral gravel, in a position 100 yards removed from the present limits of the tides, and 25 feet above the level of high-water mark, suggests a rise of land on the Ayrshire coasts, the Eriska mound seems to me to indicate a reverse operation.

The only instance in Scotland, so far as I remember, of an artificial

¹ *Proc. Soc. Ant. Scot.*, 11th June 1883.

structure, analogous to that at Eriska, is in the Beaully Firth near Inverness, a notice of which is given in the *Statistical Account of Scotland*, vol. xvii. p. 350, as follows :—

“To the south-east of Redcastle, about 400 yards within flood-mark, there is a cairn of considerable dimensions. Many of the stones, notwithstanding their collision through the violence of the tide, still bear the marks of art, and indicate the existence of a considerable building at some very remote period. There are several cairns of this description in the firth, about the origin of which even tradition is silent. Were there any vestiges of tumuli on which they could have been built, or any other circumstances which should indicate the eligibility of the sites on which they are placed, from the predatory excursions of rude barbarous tribes, but none such exist. Urns have been found in one of them. . . . Mr Fraser, minister of Kirkhill, supposes that a considerable part of the area which is dry at ebb tide, but covered with from 2 to 16 feet of water when it flows, being at least 10 square miles, must have been inhabited.”

This same structure is thus referred to by Miss Maclagan (*The Hill Forts and Stone Circles of Scotland*, p. 89) :—

“Nearly over against Redcastle, in the centre of Beaully Loch, stand the remains of the ‘Black Cairn,’ now only visible at low tide. We visited it at low-water of the lowest tide of the year, and believe it to be a crannog greatly resembling one in the neighbouring ‘Loch of the Clans,’ but resting on larger, stronger piles. Our boatmen declared they had often drawn out of it beams 9 or 10 feet long and 3 feet broad, fresh and fit for use. They had great difficulty in pulling them out, which they did by fixing their anchors in a log or pile. Tradition says that as late as 1745 the place was an island, and a refuge to which some of Prince Charles Edward’s defeated adherents fled after the battle of Culloden. The country people aver that all the land has subsided, the houses at Fort-George having sunk several feet since they were built. The fact of this crannog being now in the centre of Beaully Loch, the salt sea sweeping over it except at low tide, is proof enough of extensive change. . . . Near the mouth of the river Ness, at high-water mark, are remains of a once large cairn, called ‘Carn-aire,’ or ‘Cairn of the Sea;’ and due west from it are other three, at considerable distances apart.”

This occasional overlapping of geological phenomena with historic or prehistoric remains of man has frequently occupied the attention of archæologists, with the view of finding some well-attested fact which might give more definiteness to the natural methods of registering the occurrence of past events than their mere chronological sequence. For this purpose the position of Roman remains, and especially of the ends

of the two Roman walls in Britain relative to the limits of the adjacent seas, have been a fertile field for speculations as to the relative levels of sea and land before and since the Roman occupation of this part of the island. Many of the inferences derived from such investigations are well known to be diametrically opposed, so that while one observer says that a change in the relative level of sea and land to the extent of 25 feet has taken place in post-Roman times, another finds proof in the very same data that all such changes took place in pre-Roman times (see Geikie in *Edinburgh New Philosophical Journal*, vol. xiv. p. 106; and Smith of Jordanhill in *Proceedings of Geological Society*, vol. ii. p. 427). The subject has also not escaped the attention of continental archæologists, and a slight reference to one or two instances of a similar character which have come under my own cognizance during last summer may not be here out of place. The physical phenomena to which I refer have been especially observed in the Morbihan in the south of Brittany, a sketch of which will be found in *L'Homme* for July 25, 1884, p. 421, from the pen of Professor Gabriel de Mortillet, under the title "Envahissement de la mer sur les côtes du Morbihan."

On the small islet Er-Lanic, situated in the Morbihan sea and close to the island Gavr' Inis, M. G. de Closmadeuc, the proprietor of the latter, has described and figured, in the *Proceedings of the Société Polymathique du Morbihan*,¹ two cromlechs, *i.e.*, stone circles, situated so near to each other as to resemble the figure 8, the peculiarity of which is that only a portion of the upper cromlech is on the dry land, the rest being only visible when the tide is out. The lower cromlech is only discerned when the tides are specially low. Mr W. C. Lukis thus refers to this little island:—"El Lanic, worth visiting for the purpose of seeing a portion of a stone circle which the restless waves have encroached upon and partly destroyed, and if the tide should happen to be low, of also seeing upon the beach the prostrate stones of a second circle of equal dimensions and touching the first, as well as a fallen menhir still farther from the shore. Within the first circle have been found many flint and other stone implements, fibrolite and diorite axes, knives, scrapers, hammer-stones, animal bones, and innumerable

¹ *Bull.*, 1867, p. 18; *et ibid.*, 1883, p. 8.

fragments of earthenware vessels. The south beach, and the entire island, appears to be strewn with similar objects. Instead of the common pattern on Brittany pottery, which consists of horizontal streaks, or bands of diagonal indented lines made with a square-pointed tool, or, it may be, with a revolving toothed disc, the fragments which have been found here have mostly a vandyke ornament filled in with small round dots, artistically and carefully made. The rims of the vessels are also similarly adorned."¹ Some of the relics found here, when examined in 1867 by M. de Closmadeuc, are exhibited in the Archæological Museum at Vannes. M. de Closmadeuc has frequently visited the island and always returned with additional discoveries. Besides pottery and flint implements of all kinds, he has collected stone mortars and hatchets similar to those found in the dolmens. Regarding the latter he writes as follows:—"Des centaines de celtæ, ou haches en pierre, de toute forme, de toute dimension, le plus grand nombre en diorite ; très peu en quartz-agate, en fibrolithe, &c. ; presque tous brisés."² M. de Closmadeuc justly argues that, since it cannot be supposed that these cromlechs were erected under water, the land has sunk and has thus permitted the waves to wash over a portion of the island, including that portion on which these stone monuments were placed.

The same antiquary has also observed that some of the stones in the celebrated dolmen of Gavr'inis are of a kind of rock which is not found on the island itself, but at some distance on the mainland, as at Baden and Arradon. Hence he suggests that when the dolmen was built, Gavr'inis was not really an island but part of the mainland, a theory in my opinion quite in harmony with the depth of water and the disposition of the extraordinary currents in this part of the Morbihan Sea.³

In the commune of St Pierre-a-Quibéron there are several remains of antiquity which furnish undoubted evidence that the sea has greatly encroached upon the land since the Neolithic period. Among these may be noted particularly the menhirs or standing stones of St Pierre, near the village of that name, two dolmens at Port Blanc, and a Celtic cemetery on the isle of Thinic. The menhirs are to be seen in a culti-

¹ *Morbihan*, by W. C. Lukis, p. 9.

² *Bull. Soc. Polymat.*, 1882, p. 10.

³ *Ibid.*, p. 12.

vated field overlooking the shore, whose abrupt crumbling banks at once indicate how potent is the present disintegrating power of the waves. Mr Lukis describes them as forming a "series of five lines, which run in a south-east direction for a distance of 635 feet, and appear to have been partially destroyed by the encroachment of the sea. The stones are almost all prostrate, but they may be traced to the very edge of the beach, and even on the rocks below when the tide is out."¹ When I visited the locality on the 29th June 1884, there were only seven of the menhirs standing. Six of them are in a group within a stone's throw of a dilapidated cromlech, and, owing to irregular weathering, present curious fantastic shapes, two of which are called *the pilgrims*. The tide being low at the time, I took the opportunity of wandering among a chaos of granite blocks within the tidal mark, and greatly hidden by a luxuriant covering of sea-weeds; but I confess that I could find no evidence to prove, from any regularity of position, that these had ever been menhirs, or formed part of the alignments on the shore. But, on the other hand, should they have been so, I would not expect much evidence of the fact to remain, as, when the soil on which they stood became washed away, these standing stones would topple over irregularly, and become like ordinary boulders among the shingle.

To reach the dolmens of Port Blanc, we cross the peninsula to its west side. Here, on the summit of a high communal dune, just overlooking the precipitous sea-board, are to be seen two recently explored dolmens. They were discovered on the 18th February 1883, owing to the progressive demolition of the cliffs by the stormy sea which here constantly prevails, and which had already undermined and exposed the funereal chamber of a dolmen. Upon examination another dolmen was found close to the one thus exposed. They were at once investigated, under the auspices of the Commission des Monuments Megalithic, and found to contain skeletons, vases, and various objects of art, as bone pins, a bronze bodkin, two celts of diorite, flint flakes, a wild boar's tusk, &c. (see "*Fouilles des Dolmens du Port Blanc*," par Felix Gaillard, *Rapport déposé à la Commission des Monuments Mégalithiques*, 1883).

L'île Thinic, or *Inistilleuc*, according to the old inhabitants, is a small

¹ *Morbihan*, by W. C. Lukis, p. 29.

oval plateau, not exceeding threequarters of an acre in extent, near the village of Pontivy. During low water it is accessible on foot by a sort of rough causeway, which extends some 200 yards in length. Here an extensive burial-ground containing many stone cists enclosing bodies, flint flakes, "en quantité extraordinaire," pottery "de l'époque des dolmens," hammer-stones, and various other stone implements, portions of stags' horns, &c. This burial-ground, designated in the report as a Celtic cemetery, was discovered and examined in August 1883 by M. Felix Gaillard. This indefatigable and most practical archæologist is proprietor of the Hotel du Commerce at Plouharnel, and among the relics in his private museum is now placed a facsimile of one of the cists from this cemetery at Thinic, containing a skeleton and other funereal furnishings in their natural positions (see *Fouilles du Cimetière Celtique de L'île Thinic*, par F. Gaillard. Vannes, 1884).

Professor de Mortillet of Paris, who made a careful inspection of this cemetery and its geological surroundings during an archæological excursion he made last summer into Brittany with a number of his pupils, and whom I had the pleasure of meeting on that occasion, thus writes, in concluding his article already referred to:—"Il faut forcément reconnaître qu' à l'époque robenhausienne l'île de Thinic était enclavée dans le plateau de terre ferme et se trouvait même à une certaine distance de la mer. Ce n'est que plus tard, après, bien après la fin de l'époque robenhausienne, que la mer est venue battre contre l'île de Thinic et l'isoler du reste du plateau. Cet isolement ne peut remonter au plus qu' à deux ou trois mille ans, peut-être est-il même beaucoup moins ancien" (*L'Homme*, 1884, p. 424).

It seems that the cists in this cemetery were constructed in a stratum of fine sand, similar to the blown dunes on the mainland, a fact which could only be explained on the supposition that both the island and the mainland were formerly united. Moreover, it cannot for a moment be supposed that a people, who carried their respect to deceased friends to the extent of rearing such extraordinary monuments as the dolmens, would deposit their dead or even erect any gigantic monuments intended for perpetuity in places liable to be destroyed by such manifestly destructive agencies as the dashing waves over this boisterous coast.

Many other examples of change of sea-level bearing on archæological phenomena could be adduced, but I shall confine myself to one more. During the years 1868-9, while extensive excavations were being made for the purpose of extending the harbour of Ystad, in the extreme south of Sweden, the following sections were passed through in succession from above downwards:—(1) A thick bed of marine sands and gravels. (2) At 3 mètres below the level of the sea and 5 mètres below the quay, a stratum of moss, varying in thickness from $\frac{1}{4}$ to $\frac{1}{2}$ a mètre. In this moss were some hundreds of stumps of decayed trees of various sizes and still attached to their roots, which spread downwards to the soil underneath. (3) Below the moss were irregular layers of sand and clay of different colours mixed with striated pebbles, showing that this was the surface of a glacial "moraine du fond."

In the first or marine beds, which contained shells of the ordinary mollusca now inhabiting the Baltic, were found twenty-three boats of ordinary construction, several wooden vessels, two brass saucepans, some tin plates, two ancient guns of the 15th century type, several iron and stone cannon balls, two iron hatchets, a stone candle-holder, a dirk-sheath mounted with lead, portions of stags' horns sawn off, and a large quantity of bones, chiefly the skulls of animals. The animals represented were the ox, horse, dog (two kinds), pig, sheep, goat, fox, cat, and a small portion of two human skulls. Among all these there was not a fragment of the extinct animals usually found in the peat bogs, nor a single example of the implements usually associated with the Stone Age, nor any other article that could be considered as having a greater antiquity than four or five centuries. But, on the other hand, in the sand and clays beneath the bed of moss were found several species of land shells, a knife of grey flint, portion of a polished celt of a yellowish flint, a club head of bronze ornamented with lines and circles, two bone handles, one of which was beautifully carved and terminated in a dragon's head, and lastly a flint poignard neatly chipped. The inference drawn from these facts is, that before or about the time when Christianity was introduced into Scandinavia, land in this locality, now submerged for the last 400 or 500 years, stood above the level of the sea.¹

¹ *Congrès International d'Anthrop. et d'Arch. préhist.*, 4th session, p. 15.

Last summer I visited a remarkable megalithic monument, just then explored on the island of Jersey, near St Heliers, on the road to St Aubins. It is called the "Mont Cochon Cromlech," and consists of an "allée couverte" and a stone circle (or, according to French nomenclature, a *cromlech*), surrounding a dolmen. These structures are situated in a cultivated field within a few feet of each other, and one peculiarity of them is that they remained for ages imbedded in a heap of blown sand. In addition to the value of this find, from the state of preservation of the megalithic structures, and the urns, flint implements, and other relics discovered in them, I have to note that the surface of the soil on which they were erected is only about 22 feet above the present level of the sea. The fact of this monument being now not only close to the shore, but at so unusually low a level, makes the author of the able and interesting description of it, published in the *Société Jersiaise* for 1844, suggest that its site was formerly the centre of the island, when, according to local tradition, its area was much larger than it now is.

These few examples of marine encroachments on the land are sufficient to indicate the kind of evidence that we may expect to have to deal with in attempting to apply geological principles to the study of archæology. My chief object in drawing attention to them now is to suggest to future observers the importance of attending to the topographical position of antiquarian finds, and especially their exact localisation as regards sea-board, erosive streams, inland lakes, peat bogs, &c. I am told that in districts where blown sands accumulate along our coasts, flint arrow-heads and other stone implements of archaic types are rarely found close to the sea. In the case of the Stevenston Sands, Ayrshire, so rich in all manner of flint implements, these relics are generally not found within a distance of 300 yards from the present sea-shore; and hence this barren zone may be considered to measure the time since these stone implements and weapons ceased to be manufactured, or at least used, in the locality.

III.

THE SO-CALLED ROMAN HEADS OF THE NETHER BOW. BY DANIEL WILSON, LL.D., PRINCIPAL OF UNIVERSITY COLLEGE, TORONTO, HON. MEM. S.A. SCOT.

On my last visit to Edinburgh I was pressed into the service of some young friends to explore what little still remains of the memorials of olden times, which, in my own younger days, gave such a charm to the quaint old town occupying the ridge and its northern and southern slopes, between the Castle and Holyrood Abbey. Many a curious relic, once familiar to me, had vanished, though still enough remained to reward the search and gratify the curiosity of younger antiquaries. But among the vanished relics, which helped to confer on the romantic town of past generations so fascinating an interest, I was specially reminded of one curious antique, the restoration of which, as it then seemed to me, was as desirable as it is of easy accomplishment. Civic and sanitary reform have done their destructive work so effectually that the spirit of conservatism would fain cast its shield over what little remains of the past; and the work of restoration effected by Dr William Chambers on the collegiate church of St Giles may be accepted as some atonement for the wholesale eradication of so much that was quaint and historically interesting, though perhaps altogether unsuited to the wants, or even to the well-being of this nineteenth century, in the old town of Edinburgh.

The special relic of antiquity, to which I refer, is what was known in my younger days as the "Roman Heads" at the Nether Bow. So many years have passed since I had an opportunity of looking on the ancient bas-reliefs that, were it possible, I should be glad to have an opportunity of inspecting them anew before claiming for them an antiquity of so remote a date as the third century. If they had been correctly ascribed to a Roman sculptor, and rightly identified as representing the Emperor Septimius Severus and his Empress, they would have had a prominent claim to interest as by far the most ancient relics in the Scottish capital.

When I learned that my old friend, Dr J. Collingwood Bruce, had been appointed to the Rhind Lectureship, and had selected "The Romans in Scotland" as the subject to which he was so specially qualified to do justice, I recalled to his attention the old sculptures. But it is possible that, in the greatly overcrowded state of the Society's collection, to which they now pertain, he may have missed an opportunity of inspecting them. It may not even yet be too late to invite his verdict as a skilled expert, in reference to the authenticity of the bas-reliefs as sculptures of the age to which it has been so long the fashion to assign them.

In the construction of Jeffrey Street, and the adjacent approaches embraced in the city improvements of 1867, the old avenue of Leith Wynd, which skirted the eastern line of the city wall, has been effaced. It was, as I believe, a portion of the line of an ancient Roman road which led from the Roman seaport at the mouth of the Almond, by Canonmills, Broughton, St Ninian's Row, and Leith Wynd, to the point of intersection with the "King's Hie Gait," and thence by St Mary's Wynd and the Pleasance,—the site in mediæval times of the Convent of S. Maria de Placentia,—southward by Romana, and the Roman Trimontium, in the vale of Melrose, to the fords of the Solway. I have long since set forth the evidences of the Roman footprints.¹ The western portion of the road was still visible when Gordon was collecting the materials for his *Itinerarium Septentrionale* in the early years of the eighteenth century. After describing the Roman coins and medals in the collection of Baron Clerk, found at Cramond, "including that invaluable medal of Severus supposed to be coined on the peace with the Caledonians, one of Julia, one of Domitian, and another of Severus, with this reverse—*Felicitas Augustorum*," he goes on to say—"From this same station of Cramond runs a noble military way, towards *Castrum Alatum* or Edinburgh; but as it comes near that city it is wholly levelled and lost among the ploughed lands, and is therefore discernible but a little way." Cramond, as he conjectures, may have been "one of the Hiberna, or winter quarters of Septimius Severus

¹ *Prehistoric Annals of Scotland*, 2nd ed., vol. ii. pp. 53-56.

when he was in Scotland, as his medal found here, with the inscription *Fundator pacis*, seems to denote." ¹

The traces of the old Roman road which, in Gordon's days, were so soon lost among the ploughed fields, have been recovered at various points in subsequent years. A coin of the Emperor Vespasian, in the Society's collection, was found in 1782 in a garden in the Pleasance.² In digging in St Ninian's Row, in 1815, for the foundation of the Regent Bridge, the discovery of a quantity of fine embossed Samian ware afforded still more indubitable evidence of the Roman presence.³ At various subsequent dates, in 1822, in 1845, and on the demolition of the Collegiate Church of the Holy Trinity in 1848, portions of an ancient causeway were brought to light, which from its materials and construction confirmed the idea that it was part of the old Roman road, over which the foundations of the church were laid in 1462. Beyond this it climbed the steep ascent towards the Nether Bow, and near the point of intersection there were found, in 1850, two silver denarii of the Emperor Severus, now in the Society's cabinet, one of them bearing on the reverse a Roman soldier, holding the figure of Victory in his right hand, with the legend *AVGG. VICT.* On the reverse of the other a Victory, in flowing drapery, bears in her right hand a wreath, and in the left a cornucopia; the legend, *VICT. PARTHICA.*

In the *Reliquiæ Galeanæ*, of date March 1742, Sir John Clerk gives an account of what he assumes to have been a Roman arch, which had been recently pulled down at Edinburgh. "It was," he said, "an old arch that nobody ever imagined to be Roman, and yet it seems it was, by an urn discovered in it, with a good many silver coins, all of them common except one of Faustina Minor, which I had not. It represents her bust on one side, and on the reverse a *lectisternium*, with this inscription, *SECVLI FELICITAS.*"⁴ Unfortunately, Sir John Clerk gives no definite information as to the site of the demolished arch; but the Edinburgh of 1742 was confined within very narrow bounds, and

¹ *Itiner. Septent.*, p. 117.

² *Archæologia Scotica*, App., vol. iii. p. 72.

³ *Prehistoric Annals of Scotland*, 2nd ed., vol. ii. p. 54.

⁴ *Biblio. Topog. Brit.*, vol. ii. p. 348.

whatever may have been the true date of the masonry, the genuineness of the Roman coins is beyond all doubt. Other traces of the presence of the Romans in Edinburgh, or its immediate vicinity, are produced in the *Prehistoric Annals of Scotland*. With the abundant evidences of Roman occupation of the neighbouring seaports of Cramond and Inveresk, it can excite no surprise to recover either coins, pottery, or sculptured tablets, on so important a site of early urban settlement, midway between the Almond and the Esk.

The earliest notice of the "Roman Heads" is that of Gordon, in 1726, in the appendix to his *Itinerarium Septentrionale*. In earlier years he had explored the line of the wall of Severus, in Northumberland, in company with Sir John Clerk, had enjoyed the hospitalities of the Duke of Queensberry at Drumlanrig Castle, and minutely investigated the famous Roman works at Birrenswark, and other remains between the Nith and the Solway. He had also surveyed the line of the Antonine wall, between the Forth and the Clyde, but it is doubtful if he had visited Edinburgh, prior to the publication of the prized folio on which *The Antiquary* of Scott has conferred such enduring interest, and it was, apparently, only when he was adding the final remarks to his appendix that he was "favoured by the ingenious Mr Alexander with a draught of two very curious heads built up in a wall in Edinburgh, the sculpture of which is so excellent that," he says, "I have been advised, by the best judges of antiquity, to give it a place in my book." He pronounces the sculptured heads to be "attired in Roman habits, and indisputably works of that nation." "A very learned and illustrious antiquary," he adds, "judges them to be representations of the Emperor Septimius Severus and his wife Julia," and he himself surmises them to have been originally designed as adornments for a sarcophagus.

Immediately after the publication of the *Itinerarium Septentrionale*, Sir John Clerk wrote to his brother antiquary, Roger Gale, informing him of an expected visit of Gordon. Baron Clerk was then residing in the fine old civic mansion, still standing in Riddle's Close, in the Lawnmarket, where, in 1598, Bailie Macmoran entertained the Duke of Holstein as the City's guest, and was honoured with the presence of King James and his Queen at the banquet. There, as we may assume, Sandy

Gordon found hospitable entertainment at the later date of the occupation of the ancient lodging by Baron Clerk; and as he wended his way from the Lawnmarket to Queensberry House, in the Canongate, the mansion of his noble patron the Duke of Queensberry, to whom the *Itinerarium* is dedicated, he would pass the house of the old Scottish typographer, Thomas Bassendyne, into the front wall of which the "Roman Heads" were built, with, as Gordon notes, "a Gothic inscription, in the Monkish times, thrust in betwixt them." When in 1742 the demolition of the Roman arch disclosed the urn with its coin of Faustina Minor, and other indubitable traces of the Roman invaders, the author of the *Itinerarium Septentrionale* had itinerated far beyond the furthest flight of the Roman Eagles, and was making a new home for himself in South Carolina, where he died in 1754, leaving behind him, among other memorials, the curiously characteristic Will which is printed among the Society's *Proceedings*.¹

Some twenty-seven years later than the first notice of the "Roman Heads," they were described anew by Maitland in his *History of Edinburgh*, and their locality defined. According to the old civic historian, they had stood at some earlier date in the wall of a house on the northern side of the street, from whence they had been transferred to their later site in the Nether Bow, nearly opposite John Knox's House. On their new site, if not before, they were inserted in a panel, separated by the introduction between them of a black-letter inscription, borrowed from the Vulgate, of the curse pronounced on Adam and Eve, after the fall:—**In · sudore · vult' · tui · vesteris · pane · tuo.** To this is added the reference G. 3, which Maitland misread ANNO 1621. Mr David Laing drew attention to the correspondence of the abbreviated inscription *vult'* to the reading of the first edition of the Bible, printed at Metz in the year 1455. The incongruous conjunction of this text with the heads of Severus and Julia had given rise to the popular recognition of them as Adam and Eve; and on this Maitland attempts to improve, by noting that they occupied a panel in the wall over a baker's shop, and thence surmising that the inscription was put up in allusion to his trade. In reality such inscriptions were characteristic of the

¹ *Proc. Soc. Ant., Scot.* vol. x. p. 364.

fifteenth and sixteenth centuries. The town mansion of the Abbots of Melrose stood opposite, the site of the Chapel and Convent of St Mary was near by, and such an inscription was a most likely relic of some older building in the vicinity. Its interposition between the heads of the Roman Emperor and his Empress added to the quaint incongruity of the later arrangement which thus placed in conjunction relics of such widely different dates, and adapted them all the better to their site.

But are the basso-relievos which so long figured among the lions of the old Scottish capital, and stood so near to the intersection of the High Street by the ancient line of the Roman road, which then crossed the ridge on its way to the Roman sea-ports of Inveresk and Cramond, really genuine memorials of the visit of Severus and his Empress to this remote northern region? When I last looked on them, upwards of thirty-two years since, they still graced the façade of the old typographer's lodging in the Nether Bow; and looked Roman-like enough, at the distance from which they were viewed, with the obscuring veil that time and exposure had helped to throw over them. But so far back as 1783, the celebrated local artist, David Allan, executed an admirable engraving of them, which was subsequently produced in the third volume of the *Archæologia Scotica*, and from this a sufficiently definite opinion may be formed of the sculptures. A renewed study of them, in so far as that can be efficiently done with the old Scottish painter's aid, leads me, however reluctantly, to the conclusion, that "the Gothic inscription in the Monkish times," the intrusion of which between "Severus and his Empress" was so distasteful to the old Roman antiquary of the *Itinerary*, is in all probability the older relic of the two; and that the "Roman Heads" are in reality works of the Renaissance period, probably little, if any older than the heads which adorned the City cross, till its demolition in 1756.

But whether of the third or the sixteenth century, the old sculptures, with their incongruous motto, and the quaint fancy to which it gave rise, that the Roman Heads represented the primeval human pair on the eve of their forfeiting paradise, constituted an interesting feature of the old town which it is a pity should be lost. Transferred from the site which they so long occupied in the Nether Bow to a place in the Antiquarian

Museum, they present a contrast somewhat akin to that of a wild flower on its native hill-side, and the same when reduced to a withered mummy in a botanist's herbarium. It is not improbable that the sculptured heads, as well as the mediæval inscription, belonged originally to some structure near their old well-known site. Their locality, at any rate, by long-established prescriptive right, is unquestionably the Nether Bow; and much of their interest vanished on the demolition of the old house there, and their transfer to the safe custody of the Scottish antiquaries. A work of true conservatism was accomplished when the Society gave up the finely sculptured boss from the Kirkpatrick Sharpe collection, in order to have it replaced as the keystone of the ground ceiling of St Eloi's Chapel, in the Cathedral Church of St Giles. My object in recalling the Society's attention to the "Roman Heads," now in their safe keeping, is to offer the suggestion that the venerable sculptures be replaced in a deeply sunk panel in the façade of the building which has replaced the tenement occupied of old by Thomas Bassendyne, one of Scotland's famous typographers. I would by no means divorce the mediæval text from its former conjunction with the sculptures to which it helped to give a novel popular significance. But it would add to the interest if the whole were supplemented by a further inscription commemorating the old typographer whose rare edition of Sir David Lyndsay's poems bears to be "imprinted at Edinburgh be Thomas Bassendyne, dwelland at Nether Bow, M.D.LXXIIII"; and whose beautiful folio Bible, one of the choicest specimens of early Scottish typography, issued from the same press in 1576.

IV.

NOTES RESPECTING THE EARL OF MORAY'S TOMB AND ITS CONTENTS IN ST GILES' CHURCH. BY PETER MILLER, F.S.A. SCOT.

The following announcement appeared in the *Edinburgh Courant* of January 23, 1830 :—"The operations now going forward on the south side of St Giles' Cathedral have rendered it necessary to remove the tomb of the Regent Murray, which stood in the Old Church, part of the new wall coming immediately over it. The contents of the vault were accordingly removed on Saturday to another previously prepared for them immediately to the east of the old one. Three lead coffins, laid one over the other, were thus removed ; the upper one, with its outer wainscot case was almost entire, and bore a plate with the words "Francis Stuart died at Rheims, August 1768 aged 22."—The one in the middle was almost entire, but the outer case of wainscot fell to pieces in the hands of the workmen,—the lead coffin was stamped with a crown and the dates 1670 and 1690, the under coffin was without any inscriptions, and had been crushed flat by the superincumbent weight of the others. There was also a small coffin, about 4½ feet in length, which had been placed at the side of the large ones, and on the top of the latter, also it appears, that an infant's coffin had been deposited, but it had fallen to pieces, and the bones of the child only remained. The whole were safely removed to the new vault, over which the old inscription will be placed when the wall is finished."

From *Notes* by David Laing respecting the Earl of Moray's tomb (in the *Proceedings*, vol. i. p. 191) it appears that an investigation was made in the month of April 1850, by the authority of the Town Council, upon a request made by the family. The reason for the investigation is stated to have been with the view of ascertaining whether the Earl of Murray (that is, the second Earl of Murray, who was slain at Donibristle by the Earl of Huntly, on the 7th of February 1591) had been interred in the burying vault of St Giles' or in Dalgetty Church. The particulars given by Mr Laing are from a notice written at the time by the gentlemen who superintended the investigation on behalf of the family. The details are much the same as in the preceding notice of 1830. It is only necessary to quote the reference to the third lead coffin, which in the preceding notice was described as having been crushed flat by the weight of the others that had been placed above it.

"The third, or undermost, was also a leaden one: It bore marks of considerable antiquity, showing the rounded form of the head and shoulders, and in many places was much indented, but had no inscription of any kind, though it is more than probable there had been an inscription, which may have been torn or rubbed off when the coffin was removed during the alterations of the church. A portion of the lead opposite to the face was broken, and through the opening was seen a part of the skull, the top of which had been sawn through, probably for the purpose of embalming, and the teeth in the upper jaw were quite entire. Though there was no way of positively identifying these remains with those of the Regent, still, from the fact of there being only three coffins in the vault, and it being clear that neither of the other two coffins was that of the Regent, there seems little doubt that this lowest coffin did contain his remains."

That conclusion of Mr Laing was a mistake, as was demonstrated on the 13th April 1879, when the contents of the Moray vault in the south transept of St. Giles' were carefully examined by Professor Douglas Maclagan, myself, Dr William Chambers, Mr Hay the architect, and other gentlemen, in the expectation of finding some clue to the remains of the Regent Murray. One coffin contained the remains of Francis Stuart, who died at Rheims, August 1768, aged 22 years. The other contained the remains of the Earl of Galloway, with the words—

"NAT 8 JANR 1670, OBIT 26 SEP 1690."

The third was a leaden coffin, very much flattened and shaped to the head and shoulders as described by Mr Laing in his notice, with a hole in the lead opposite the face. On opening a portion of the lead it was ascertained that the remains were those of a female apparently about fifty years old or more, and in a good state of preservation. The upper part of the skull had been sawn off. The hair was red; the front teeth were much worn down and one of the molars was decayed, with a hole on one side of it. Besides the coffins there were in the vault a considerable quantity of rubbish mixed with human remains—decayed portions of old coffins and the metal plate that had been on the coffin of Francis Stuart. Among a number of skulls that were in the vault one

of them excited much observation on account of the thickness of its walls. It had been sawn through in the ordinary way, was in good preservation, its walls seemed to be from $\frac{3}{8}$ inch to $\frac{1}{2}$ inch in thickness.

The following extract from the Records of the Town Council of Edinburgh, dated 19th July 1588, clearly indicates whose remains they were :—

“At the desyr of the kin and freyns of the vmquhill Countess of Argyle laitly deceisset within the burgh, and for the luif and favour thai buir to hir vmquhill first husband the Erle of Murray, regent for the tyme, grants and consentis that sho be bureit in the Hie Kirk of this burgh, in the tomb and sepulchre of hir said vmquhill husband.”

It seems more than probable that when in 1588, eighteen years after the Earl of Murray was laid in the vault of St. Giles', his wife's remains were either placed above his, or placed alongside of them. The coffin containing the remains of the Earl of Galloway, which was very broad and exceedingly heavy, was placed above that of the Countess of Argyle and that of Francis Stuart on the top of the other two. The immense weight of the two upper ones sufficiently accounts for the flattened appearance of the lowermost.

James Earl of Murray married, in 1561, Anne, daughter of William Keith, Earl Mareschal, and by that lady had two daughters—Elizabeth and Margaret. The Regent was assassinated on the 23rd January 1570, in the 37th year of his age. His widow afterwards married Colin Campbell, 6th Earl of Argyle ; she was his second wife and had two sons to him. His lordship died in 1584, and his Countess survived him four years, dying in July 1588. Her age cannot be ascertained from the peerage books.

V.

NOTICE OF UNPUBLISHED RENTALS OF THE ANCIENT LORDSHIP OF
SHETLAND AND OF THE EARLDOM AND BISHOPRIC OF ORKNEY.
By GILBERT GOUDIE, TREASURER, S.A. SCOT.

The crown lands of Orkney and Shetland, known, since the islands became connected with Scotland, as the *Earldom* estate of Orkney and the *Lordship* of Shetland, together with the duties exigible in addition by the Crown and its donatories, are simply the continuation, with ever varying increment, of the heritable domain and traditional exactions of the old Scandinavian Earls of Orkney in both groups of islands. These lands and duties, originally held under the King of Denmark and Norway, gradually assumed the character of absolute and irredeemable property in the person of the Scottish sovereign, and successive donatories, though only holding under redeemable charters from the Crown, made free with them, by sale and excambion, as if they had been their own.

The bishopric estates and revenues in Orkney and Shetland descended, in the same way, to the Roman Catholic and Reformed Bishops of the Scottish Church from the Scandinavian prelates who preceded them, and were equally tampered with by the successive holders.

Regarding the origination and growth of these two estates in the islands, the absence of authentic information leaves us very much to conjecture. In the case of the Earldom, King Harold of the Fairhair, according to the Saga of Olaf Trygvissón, simply "gave" the whole islands to Rognvald, upon whom the title of Earl was first conferred, about the year 872. This cannot, however, be supposed to imply the creation of a landed estate in the person of the Earl or the negation of private property in others, for the odal landholders appear to have had their inalienable rights from the beginning. The charters, in much later times, to the Stewart Earls were not less comprehensive in their terms than the gift of King Harold. That in favour of Lord Robert Stewart, dated 26th May 1564, conveyed to him, in the ordinary legal phraseology of the day, "all and whole the lands of Orkney and Zetland, with

all and sundry the isles belonging and pertaining thereto, with all and each of the castles, towers, fortalices, woods, mills, multures, fishings," &c. Subsequent Crown charters were still more full and precise, but interference with private property was none the less arbitrary and illegal. The right to collect the *skat* from the whole islands, and to acquire a private domain by conquest or confiscation, was doubtless the privilege of the Earls from the beginning. It was thus that at Orphir, Birsay, Kirkwall, Sumburgh, Scalloway, and elsewhere, earldom properties were formed, and residences erected. The fortunes of war, private feuds, poverty of private owners, fines, escheat, *grippings*, swelled the estate of the Earls to the large dimensions it had attained at the time of the Impignoration to Scotland (1468); and its extent was still farther largely increased by the rapacity of the Stewart Earls and other grantees in the course of the next and following centuries.

When the Earldom estates and revenues were acquired by the Crown from Earl William St Clair in 1471, it was enacted (20th February of that year) that these should "nocht be gevin away in time to cum to na persain or persainis excep alenarily to ane of the Kingis sonnys of lauchful bed." It is well known to every student of northern history how in practice this engagement was falsified; how from age to age those crown lands and revenues were gifted to illegitimate sons or court favourites, until in 1766 the whole lands and revenues of the Earldom and Lordship were acquired from the Earl of Morton for £63,000 by Sir Lawrence Dundas, in the possession of whose representative, the Earl of Zetland, they still remain. The Earldom of Orkney and Lordship of Shetland combined has come down through all those ages as a distinct and determinate *corpus*. It is otherwise with the Scottish Maormordoms and Thanages, which can now be recognised only as traditional and indeterminate, in respect both of their extent and their revenues. It is this living permanence, so indissolubly and so largely mixed up with the history of the islands, that gives to the Earldom its abiding interest, and renders the investigation of its records from age to age so important in the study of Orkney and Shetland history.

Though we can with some certainty approximate the date of the erection of the Bishopric of Orkney as probably about the year 1102.

when William the Old, regarded as the first bishop, appears to have been consecrated, there is yet the utmost uncertainty as to the origin of the secular endowments, either as regards heritable estate vested in the bishops, or power to them to tithe as in later times. There were indeed Bishops of Orkney, consecrated by Archbishops of Hamburg and York, before Bishop William's time, ere the Archbishop of Drontheim in Norway had been finally recognised as the metropolitan of the northern see; but we are equally in the dark as to the special provision for their maintenance, further than what may be assumed as acquired by direction of the Pope, by munificence of lay donors, by cupidity of bishops and clergy, by fines, confiscations, and such other resources as the power of the Church, under countenance of the Crown and the Earl, could make available for its own aggrandisement. Certainly the bishopric estate had grown to important dimensions by the time of the Reformation. Bishop Graham, reporting to the Magistrates of Edinburgh in 1642, states that he understood "the old Bishopric of Orknay was a greate thing, and lay *sparsim* thro'out the haill parochines of Orknay and Shetland. Besyde his lands, he hade the teynds of aughtene Kirks. His lands grew daily as irregularities increased in the countrey."

The mutations of the Bishopric estate have been scarcely less marked than those of the Earldom. By excambion and attempted consolidations, by appropriations to secular purposes, when all power was engrossed by the Stewart Earls, and to ecclesiastical purposes of different complexion, as Episcopacy or Presbyterianism was in the ascendant, its character and extent have been materially altered. By excambion between the Crown and Bishop Law in 1614, the Shetland portion of the Bishopric estate was transferred to the Crown in exchange for lands concentrated in one district in Orkney. With the abolition of Episcopacy at the Revolution Settlement these Bishopric lands became finally vested in the Crown; and what now remains of them is administered by the Department of Woods and Forests, under the charge of a local chamberlain. Much diminished by successive changes in former times, its latest curtailment has been in our own day, considerable portions having been sold in 1854-56.

While the origin both of the Earldom and Bishopric estates in Orkney and Shetland is thus obscure, the RENTALS which have been preserved

give a *vidimus* of the state of these properties, and, at the same time, throw a remarkable light upon the condition and value of occupied lands in the islands at different dates, in the course of three or four centuries past. The peculiar complexity of the land tenure and of the burdens on land, resulting from the intermixture of Norwegian and Scottish forms and usages, adds additional interest as well as difficulty to the attempt to prosecute an inquiry in reference to those lands and duties. The foundation for all such inquiries was laid by Sheriff Peterkin of Orkney, whose "*Rentals of the Ancient Earldom and Bishopric of Orkney*" was published in 1820. In those rentals we have detailed particulars of different dates from the 15th century, of the lands in every district in Orkney—their extent, feu or scat duty, landmail, teinds, and other burdens exigible from them, with incidental information otherwise of much value. The rentals published by Peterkin are the following, viz:—

- I. Lord Sinclair's Rental Book of Orkney. 1497–1503.
- II. The Rentale of King and Bischoppis Lands of Orkney. 1595.
- III. Bishop Laws' Rental of the Bishopric of Orkney. 1614.
- IV. Rentall of the Landis and Dewties thair of quhilkis apperteinit to the lait Bishoprik of Orknay. 1642.
- V. The True and Just Rentall of all the Fermis, Debtis, Dewties and Gersumes off the Bischoprick of Orknay. n.d.
- VI. Donald Groats' Bishoprick Compt.-Book. Cropt, 1739.

But these detailed "*Rentals*" are not all that Peterkin brought to light in illustration of the successive stages of the Earldom and Bishopric estates. It was he who first directed attention to the series of charters and other documents belonging to the Bishopric, discovered in 1819, and which are preserved in the Charter House of the city of Edinburgh, the city having held a lease of the Bishopric revenues for a period of years from 1641 to 1662.¹ The mere list of the principal papers of this series suggests how extensive the treasures of information

¹ Charter of Mortification in favour of the Town of Edinburgh of the Bishoprick of Orkney for maintenance of their ministers, 1641.

are which lie available for the student who has leisure to pursue investigation there, *e.g.* :—

1. Inventory of Writs and Papers of the Bishoprick of Orkney, delivered to the Town of Edinburgh in 1642 (comprising numerous Charters from 1490 to 1614, Rentals, and Miscellaneous Papers).

2. Certane questions to be resolved anent the Bishoprick of Orkney given to Mr Buchanan, 17th October 1642.

3. Answers to certane Propositions requirit be the Richt Hon. the Provost, Bailzies, and Counsall of Edinburgh, concerning the Bishoprick of Orkney, this 19th of October 1642.

4. Queries to the late Bishop of Orkney anent the State of the Bishopric, and his Answers thereto, 1642.

5. Further Answers by Bishop Grahame.

6. Propositions be the Towne of Edinburgh to be resolved upon be the lait Bishop of Orkney, and his Answers to the Propositiones.

7. Report on Bishopric Parishes, 1627.

8. Report of Earldom Parishes—similar.

In addition to what relates strictly to the Bishopric estate, these papers in the possession of the City of Edinburgh contain inquisitions as to the Churches and Church Revenues, then in many instances in a dilapidated state, both in Orkney and Shetland.¹

Besides these publications by Peterkin, there is a small volume "The Rentall of the Provostrie of Orkney, 19th March 1584," printed by Sheriff Maconochie.

The foregoing preliminary observations bring me to the purport of the present communication, which is to show that, while so much has been done to illustrate the nature and extent of the Earldom and Bishopric estates and revenues in Orkney, absolutely nothing of the kind has been done for Shetland; while there is, in reality, not less ancient and valuable material extant, though up to the present time practically unknown,

¹ One bundle of papers is described as "Ane uther bunthell, quhairin is conteinit the steipend dew to everie kirk in Zeatland, and quhairout of the samen is appoyntit to be payit," &c. This list of the stipends is, I suppose, the paper printed in my communication to the Society on the "Revenues of the Parochial Benefices of Shetland in the Beginning of the 17th Century."—*Proceedings*, vol. vi., new series, p. 291.

relating to the Lordship of Shetland. These are ancient Rentals, comprising proprietary lands of the Earls, and Skat and other duties exigible by them, in general form resembling the Orkney rentals, but for the most part entirely distinct, both as regards the denomination and character of the duties and the commodities in which the payments were made.

In these records we are brought into direct contact with peasant holdings and village communities of a very early type, in which the lands were intermixed and runrig, with an agricultural system which has long since disappeared in most mainland districts of Scotland, but which continues to be visible in Shetland to the present day. It is here, therefore, if anywhere, that we may look for pertinent illustrations of our most simple and archaic forms of rural economy; an economy, locally no doubt, in many respects unique, from the nature of the case—remote and insular, partly Scandinavian, partly Scottish—but yet of widespread interest in its general bearings. It is impossible, in the limits of a communication like the present, to print in full any one of these Rentals. I shall, therefore, content myself with transcribing such brief extracts as will serve to give an approximately accurate indication of their character, and perhaps induce some future writer to embrace them all in a volume relating to Shetland, of the same character as Peterkin's "Rentals of Orkney." The order followed is chronological.

I. THE SKAT BOOK OF ZETLAND (15th or early 16th Century?).

This, apparently the most ancient of all the northern Rentals, was formerly in the possession of Mr Balfour of Balfour and Trinaby, who, a number of years since, allowed me to make a copy of his own transcript of it. It is now deposited in the General Register House, among the many other historical manuscripts relating to the islands. It bears no date, and makes no personal or other references sufficiently pointed to indicate the time conclusively. Old as it is, and expressed in a kind of mixed Scottish, it is a copy of a still earlier Rental, while presumably the islands were yet Scandinavian. If, as seems most likely, the reference to "my lord" (p. 220) is to one of the Sinclair Earls, the date must be at no great distance from the time of the impignoration to Scotland (1468), the language and whole tenor seeming to be inconsistent with

what we should look for in the epoch of the Stewart Earls (1564–1614). The connection of the Sinclair family with the islands did not terminate with their resignation of the Earldom in 1471. Henry, Lord Sinclair, obtained, in 1489, a lease of the Earldom and Lordship, which only ended with his death at Flodden in 1513. “My lord” of the ancient line might therefore apply to a time as late as the last-mentioned date. Its own caligraphic style is indeed sufficiently antiquated, but it winds up with a colophon expressive of its imperfect rendering of the more ancient and, to the transcriber, scarcely intelligible, original, thus (contractions expanded):—

“Finis quanti reperit.

In aventour this present writting be nocht our legiable for the strange leid and termis contenit in the samin to the reidaris ban nocht the hand that wret it for it is als obscoir to the wrettar nocht than equivalent cum originali in forma et in valore de verbo in verbum,” &c.

This rental bears no title, but is headed “The Skat of Zetland,” and seems to contain the whole revenues of the Lordship of Shetland with the exception of the northern isles of Yell, Unst, and Fetlar. It is impossible to assign a reason for the omission of these important districts. The revenues are enumerated under the two separate heads of (1) *Skat*, a burden apparently affecting all (or almost all) occupied land, and (2) *Landmaills*, the rent payable by tenants of property lands of the Lordship, and latterly by holders of feued lands. We have thus the total burdens affecting every parcel of land in the islands (apart from the excepted districts); and the enumeration of the occupied spots at this early period is of great interest. The division into parishes, in no material respect differing from the present, is also noteworthy. The order of contents is as follows (retaining the old spelling):—

I. SKAT, payable by

Burray.	Northt Maven.
Tynguell.	Nesting.
Dunrosnes.	Dailting.

Sandis, Esting, and Wawiss.	Lynnasting.
Qwailsay and the Skarreis.	Quhitnes.
Brassay.	Wysdail.
Golberwik.	

II. LANDMAILLS, payable by

Northmaven.	Dunrosnea.
Dailting.	Quhitnes.
Burrones.	Sandsting, Esting, and Wawiss.
Tynguell.	Lunnasting and Nesting.
Brassa and Burra.	Quhailsay and Scherrayss.

Then follows (III.) a second enumeration of SKAT from the parishes named above (No. I.) with the addition of the isle of Tronderay and Setir [?]. The two lists of Skat vary, both in the names of the places and in the extent of the exaction (when the places named are the same). The explanation of this is not apparent.

The following transcription of the portion relating to a single district, will sufficiently indicate the character of the whole Rental :—

(A) SKAT—DUNROSNES.

Item Swynbrocht [Sumburgh] ij ã iiij ð in my lordis handis.¹

Item Tullope [Tolob]— iiij ã viij ð veafirht.

¹ Sumburgh, which appears to have been manorial property of the Orkney *Jarls* from an early period, is thus shown to have been subject to its proper burden of skat like other places, though in the hands of "my lord" himself. In a subsequent rental, that of 1777-1778 (No. III.) it is expressly stated that the 24 merks of Sumburgh "never paid Scatt." No doubt, with the advent of the Stewart Earls the payment would be ignored, and in later times would be entirely lost sight of. Unluckily this reference is too vague to admit of identification either as regards person or date. The earliest formal document relating to the lands of Sumburgh that I am aware of is the charter granted in 1498 by William, Earl of Caithness (eldest son of William, last of the Sinclair Earls of Orkney), and his other brothers and sisters, in favour of their brother, Sir David Sinclair, Fowde of Shetland, in which they conveyed to Sir David the said lands (*omnes et singulas ac integras terras de Swinburgh cum pertinen. et contingen. jacen. in dominio Zellandiæ*). Sir David, who was also chief captain of the castle in Bergen, Norway, by his testament, dated at Tingwall, 9th July 1506, bequeathed to Lord Sinclair "the reversion from Hjaltland [Shetland] for the current year, and all the landed property inherited by himself

- Item Oxinsta ii s vadmell iij d leanger.
- Item Oxniabo iiij s vadmell viij ellis silver and vadmell viij d leanger.
- Item in Dealle ij s vadmell x skynis and silver and iii d leanger.
- Item vj merk in Daile ix ellis wadmell.
- Item Brow xxxij ellis vadmell xvij d leanger.
- Item Vo xx ellis iij d leanger.
- Item Clumlie vj s vadmell viij d skynis and silver vj d leanger.
- Item Exnabo in Sanedavik iiij s vedmel vj d leanger.
- Item Sanedavik tenetur iiij s vadmell vj d leanger.
- Item Schonderwek iij s vadmell iij d leanger veafirht.
- Item a merk in Schonderwek iij ellis wadmell.
- Item a merk in Hoiswek iij ellis vadmell tenetur vj d leanger.
- Item Houland Cumlawek and Veaseter v s v d leanger veafirht.
- Item Burrowland Sandwik and Leobothan.

after his father in Hjaltland." While Sumburgh was thus treated as private property by members of the Sinclair family rather than as Crown lands, forming part of the ancient lordship, it appears to have reverted to its former character, and to have passed on to the Stewart Earls under the grant by the Crown of the Earldom and Lordship to Lord Robert in 1564, for in 1592 we find his son Earl Patrick setting heritably, in feu farm, to William Bruce, first of Symbister and Sumburgh, "the 20 merk land, 6 pennies the merk, of Soundburgh callit kingis landis," with the 4 merk laud, 6 pennies the merk "callit Provestis landis lyand rynrig with the said 20 merk land of Soundburgh." These latter belonged to the Provost of the Cathedral of Bergen, and the title to them appears to have been regarded as doubtful until ratified by the King of Denmark and Norway, as coming in place of the ancient church of Norway, on 28th August 1662 (*Proceedings of the Society*, vol. ii., new series, p. 13). By a subsequent feu-contract in 1604, the said "nobill lord" confirmed William Bruce in the said lands, reserving always "the ryt and titill of the houss laitle biggit be him [the Earl] upon the ground of the said landis of Soundburgh on the south syd of the new hall, togidder with aue yaird adjacent thairto at the south eist gabill of the said new hall off the lenth and breid of threscoir futes in everie quarter thairof, togidder with the pasturage of twa ky and twa oxene in the summer season." The "new hall" referred to is apparently the now shapeless ruin—*Jarlshof* of the *Pirate*—close by the residence erected by the present Mr Bruce of Sumburgh. In the contract in question the Earl allows to Bruce the keeping of the foresaid "house and fortalice" of Sumburgh, subject to his being answerable for the inside "plennissing" and moveables therein; and the Earl further reserves the "right to receive and uplift the hail profittis and commodities of all Orknay fysche boittis and Cathnes fysche boittis upon the ground of the said landis of Soundburgh," payable by the fishers for liberty to build booths or lodges, and "cast fuill and devot" in connection therewith (Sumburgh Charters). There was thus, three centuries ago, a concourse of fishing boats at Shetland from Orkney and the coasts of Scotland very much as we have seen revived within the last few years.

- Item ix merk in Burrowland bayth skat and landmaile iiij s vadmell
v s h leanger tenetur with Henry Sinclair als mekill.
- Item Sandwek and Leebothin landmaile and skat i pak vadmell iiij
s leanger.
- Item Pykagar v s h merk vi s ye merk iiij ellis vadmell.
- Item iiij merk in Qwharof vj s ye merk vij ellis vadmell.
- Item iiij last h in Ayt with the guidwyff nocht pait.
- Item iiij merk in Uphuss vj s ye merk vij ellis vadmell.
- Item ix merk in Setir vj s ye merk iiij s vadmell tenetur ix ellis.
- Item in Bryenes [?] in Konesbrocht [Kunningsburgh] xij merk vj s ye
merk iiij s vadmell.
- Item xij merk for Vesten'o in ye guidwyffis hand nocht pait.
- Item v merk for ye Vesten'o s ellis vadmell.
- Item Broustoris land iiij merk viij ellis vj s ye merk.
- Item Tenetur iiij merk with ye guidwyff.
- Item vj merk in Tow vj s ye merk xj ellis.
- Item leanger in Konosbrocht xvij s.
- Item Flatbuster vj s vadmell xj s leanger.
- Item viij s vadmell and skynis veafirht.
- Item Kondell [Quendale] ix s veafirht.
- Item iiij merk in Kondell iiij s ye merk iiij ellis vadmell.
- Item Regusta [Ringasta] xvj ellis vadmell ij s leanger.
- Item Nois [Noss] iiij s veafirht.
- Item Schevsbrocht v s tenetur a s with Sande Sincler and iiij s xiiij s
leanger pait.
- Item Rerwek iiij s vadmell and skynis vj s leanger.
- Item Hilduell viij s vadmell and viij s xvij s leanger.
- Item Schelberry iiij s vadmell iiij s leanger.
- Item ye half of South Yirland [Ireland = Eyrreland] iiij s vadmell iiij s
leanger.
- Item a last i South Yirland ix ellis vadmell ij s leanger tenetur a s.

(B) DUNROSNES [Landmaills].

- Item viij merk in Schonderwek xxxij s fatguid.
- Item Sande [in] Schatnes viij merk ij s butir.
- Item Roull in Schatness ix merk h vj s ye merk ij s butir tenetur vij s.
- Item Thomas Copland iiij merk viij s fatguid.
- Item Yalleman for v merk iiij s Skatnes a s butir tenetur a s and a merk
got.

- Item Thomas [in] Scholland v merk in Schatnes x ā fatguid.
 Item Guttrun in Scholland v merk in Schatnes and ij merk in Tullope
 fatguid xx t butir tenetur iiij ā.
 Item ij merk in Tullope pait.
 Item Henry in Barrohus viij merk in Tullop viij ā fatguid.
 Item a merk in Goit pait.
 Item William [in] Vo [?] vij merk xiiij ā fatguid.
 Item Manis in Le ij merk ij uris v ā fatguid.
 Item Halle in Le iij merk and iij merk now cumin ij t butir.
 Item Sowart [Siwart or Sigurd] in Loopell ij merk and ij uris v t butir.
 Item William in Vo ij merk and ij ure iiij ā butir.
 Item Magnus Copland viij merk in Oxinasta xvij ā.
 Item Angus in Brek ij merk iiij ā butir.
 Item Nicholess Hellos [?] iij merk in Oxinabo v ā.
 Item Troswek xj merk xxj ā fatguid.
 Item Clymlie ij merk viij ā ye merk v ā butir.
 Item Louesseter ij ure ij ā.
 Item vj merk in Reirwek xij ā ye merk ij ā fatguid.
 Item v merk in Reirwek xx ā.
 Item ij merk in Schoisbrucht and ij ure in Nosse for ij yeris ij t butir.
 Item vj merk in Setir viij ā ye merk xvj ā fatguid.
 Item iij merk in Hildowell and ij uris a t butir.
 Item ij merk in Quinesta and vj h in Garthe vij ā fatguid.
 Item Bakasater ij merk vj ā ye merk h a t.
 Item ij merk in Kondell iiij ā butir.
 Item vij merk in Garthe a t butir.
 Item vj merk in Acratam [?] xvj ā fatguid.
 Item Spens [?] v merk x ā fatguid.
 Item x merk [in] Kondell iij t butir tenetur ij ā x ellis vadmell.

(C) DUNROSNES SCHAT [a second time].

- Item Skatnes iij ā viij ā tenetur with Henrie Sincler iiij ā.
 Item Le iij ā iiij ā.
 Item Haistensgar xiiij ā tenetur iiij ā grass [sum ?] ne vadmell iij ā land-
 male.
 Item Oxnasta a ā fatguid.
 Item Oxnabo a merk i ā fatguid.
 Item Oxnabo ye Schat xvj ā fatguid adt xvj ā.
 Item Brow v mellis and ij ā and ix merk h iiij ā ye merk xiiij ā.

Item Haldawell iiij s iiij s.
 Item Reggasta xvj s.
 Item Vo xx s fatguid.
 Item Schelberre ij s fatguid.
 Item Clumle iij s iiij s.
 Item Hoswek a merk ij s fatguid.
 Item ye half of Burroland vj s i skat.
 Item ix merk in Burroland vj s merk xvij s fatguid.
 Item Sandwek and Leabaton v s.
 Item vj h merk in Pikagar iij s fatguid.
 Item a merk in Schouderwek ij s fatguid.
 Item for Vesten O v merk ix s fatguid.
 Item Burrones in Konesbrocht xij merk vj s ye merk ij s fatguid.
 Item Brousaris land iiij merk viij s fatguid tenetur iij merk.
 Item for Ayt xvj s in skat.
 Item ix merk in Satir vj s ye merk xvij s fatguid.
 Item Tow vj merk vj s ye merk xj s fatguid.
 Item Flatbuster Schat iij s fatguid.
 Item Uphons in Tomwek [?] xxi s.
 Item Quharf iiij merk vi s ye merk vij s fatguid.
 Item iiij merk in Upfud [Uphous?] vj s ye merk viij s fatguid.
 Item Daill a s skat.
 Item Daill v merk viij s ye merk ix s fatguid.
 Item Reirwek Skat ij s.
 Item Schosbrucht Schat ij s vj s tenetur vj s.
 Item iiij merk in Schosswell [?] vij s ye merk ix s fatguid.
 Item Southe Erland Skat ij s iij s.
 Item a last in Schowta vj s fatguid.

I have been thus particular in transcribing the full details of one district, the parishes of Dunrossness, Sandwick, and Cunningsburgh, then and now united and forming a single "ministry," in order to show the general character of the rental, and at the same time to give unabridged material so far for analysis at any future time.

The list contains almost every township (*tún*) now existing in the district comprised in it; the most noteworthy exceptions are Levenwick and Maywick, which have been peopled districts for a very lengthened period. Their omission is not easily explained, especially as they appear

in all later rentals. Other places omitted are mostly *outssets* of later times, probably not then existing.

Landmaills, it has been already explained, are *rents* for lands belonging to the Earldom and Lordship in property, or *feus* payable in respect of lands feudalised. As the lands in the islands were originally all *ulal*, it was only in later times that the feu-duties came to amount to anything considerable, as feudal charters were more and more forced upon the native landholders. I prefer not to enter here upon the vexed question of the nature and incidence of *skat*, whether, as contended for by the Crown donatories, it is a feudal burden due to them as superiors; or whether, as insisted upon from age to age by the landholders, it is a *tax*, originally payable through the Earls, for the support of government, and should stand in place of, or be superseded by, the British land-tax. It is needless to say that the former contention has been successfully maintained, and that both *skat* and land-tax have all along been exacted. It is also a question whether *skat* was leviable upon cultivated lands as such, or, as I think was the case, upon such lands in respect of their *skathald*, or common pasture ground, which, not being private property, belonged to the Crown, and was therefore a proper subject for proportional rating. The exactions of *wattle*, and *sheep and ox money*, do not appear at this time. The latter was not imposed until about the years 1572-1575.

The duties are paid in *wadmell*, skins, butter, *fat-guid*, and money.

Wadmell is the native coarse woollen cloth (Norse, *Vadmál*), formerly an important article of exchange and payment in all the Scandinavian North.

Fat-guid appears to comprise butter and oil. The term is used in this sense in Lord Sinclair's Rental (1497) p. 15, "fat guid butter, and ulie;" and Pinkerton so explains it in his Glossary. Oil is not mentioned by name in this Rental.

In numerous instances, the term *Leanger* is used as denoting the name or nature of the duty. This is presumably *Leidangr*, which, in the sense of a *war contribution*, a *fixed perpetual duty paid to the King*, occurs frequently in Norse, Danish, and Swedish laws of the twelfth and thirteenth centuries (Cleasby-Vigfusson Dictionary, *sub voce*). In the

complaints against Lawrence Bruce of Cultemalindie (1576) it is asserted by the people that "thair is ane dewitie callit Leanger, quhilk the Commonis of Zetland payis yeirlie, followand their wadmell, quhilk extendis to four Dense [Danish] quhytis, or ane calf skin, with everie xxiiij cutteill of wadmell," which had been grievously augmented by Cultemalindie.

The term *veafirht*, frequently occurring in the rental, is to me unintelligible.

Tenetur is, I imagine, equivalent to "retained" in later rentals, which is there used to imply that the payment is withheld, either from inability to pay or from the land being uncultivated, or *ley*, and therefore, for the time, not subject to the exaction.

The rental does not indicate how the rents and duties were collected; whether by the Earl or his representative direct from the individual occupants of the land; or whether the whole was allocated upon districts, and collected in slump by a servant or tacksman. The general understanding is that the *Under Fowde* of each parish was the representative of Government and charged with the collection of the dues, the *Lawrightmen* (Norse, *Lögretta-menn*) seeing that justice and due measurement were observed between him and the commons. The money payments are computed in merks (13s. 4d. Scots), shillings, and pence.

II. RENTALL OF YETLAND, 1628.

This is a small manuscript volume, foolscap folio, preserved in the General Register House, part of an extensive collection relating to the islands. It is headed—

"The Compt of the Landis within the severall parochines and yles of Yetland gevin in be the fowdis for collecting of the taxation compting vxx [*i.e.*, 5-20] to the hundred."

Anciently every parish in Shetland was administered in its local government by a Fowde (Norse, *Foged*; still common in Norway), superseded in later times by the Scottish title of Bailie. The Great Fowde was the supreme administrator of law and justice in the islands, and held his principal court at Tingwall. The "Compt" rendered by the parochial Fowdes on this occasion, which has fortunately been pre-

served, begins with an abstract of the extent of occupied land in the islands, stated separately in parishes, thus :—

	Merks.		Merks.
Dunrosnes,	1917	Wallis,	985
Burray, Gulberwek, Tron-		Delting,	839
dray, and Quarff, . .	701	Nesting,	854
Tingwall,	815	Northmaven, . . .	1100
Bressay,	373	Yell,	1526
Quhytnes,	364	Unst,	2087
Weisdail,	341	Fetlar,	701
Aithsting,	789		

In all 13,392 merks. (The figures are given in the Roman notation, *e.g.*, Dunrosnes, $j^m ix^c xvij$ merk $\frac{1}{2}$ merk land.) The importance of this, as showing the extent of settled occupancy at the time (1628), and as forming a basis of comparison with all subsequent rentals, cannot be overestimated. In the detailed rentals of the parishes we have further the separate occupied rooms, or townships (*túns*), which make up the aggregates as above.

The next entry is an explanatory statement “Anent the weyghtis measuris and reckningis of the dewties of Yetland,” which is of sufficient importance to entitle it to be printed in full :—

ANENT THE WEYCHTIS MEASURIS AND REKNINGIS OF THE DEWTIES OF
YETLAND.

Ane cuttell wodmell is a Zelandis elne pryce thairof is 4 $\frac{1}{2}$ Scottis.

Sex cuttellis is a shilling wodmell and ten shilling wodmell is a pak.

Ane lea^r [1] is payable be a calf skin or half cuttell wodmell, or pryce thairof 2 $\frac{1}{2}$.*

Ane d. butter is 4 merk butter : six pennyis butter makis ane leispund.

Tuelff leispund makis a barrell butter. The pryce of the leispund is 48 $\frac{1}{2}$.

¹ This contracted term “lea^r” is probably *Leanger*, which occurs frequently as a duty in Shetland in the Skat rental No. 1. of the present paper. I have endeavoured to explain it on p. 225, *ante*.

Ane can oyllie is the measure of a Scottis quart pryce thairof in the country is 12 ȝ.

4 canis makis ane bull and 9 bullis makis ane barrell oyllie.

Aught uris of land makis ane merk of land : 18 merk land makis ane last of land, and 4 lastis of land is a piece of corneteynd.

Ane last land being 18 merk payis 6 meillia, viz., 3 leispund butter, 3 bullis oyllie.

Whair the corneteynd is payit in packit guidis ilk peice corneteynd is ane barrell : ane barrell butter ane yeir, and ane barrell oyllie anothir yeir.

Ilk Zetland shilling is 2 meillis quhairof ane meill payit in butter and anothir in oyllie.

Ilk meill of Scat is ane leispund butter or ane bull oyllie.

Follows :—*Chairge of monyie for the Dewteis of Yetland, Crop 1627, as it was gevin be mr jon Dick¹ to his father.*

After this statement, the Rental proper begins with the headings, "Rentall of the Dewties of Yetland," comprising—(1) *Landmeallis* (or Landmalls), estimated in wadmell and butter; and (2) the *Scat*, estimated in wadmell, butter, and oil, of which the following are specimen entries, viz. :—

I. DUNROSNES.

	<i>Landmeallis.</i>	<i>Butter.</i>
Soundburght, . . .	xx merk vj ȝ the merk xl cuttell	6 lb. 4 pence.
Clumlie, . . .	ij merk viij ȝ merk v cuttell	v ȝ.

¹ The Dick family of Edinburgh were long connected with Orkney and Shetland. Alexander Dick, before 1560, resided chiefly on his property in Orkney. He died in 1580, and was succeeded by his son, John Dick, who is said to have been a merchant of great eminence. His son, Sir William Dick, Lord Provost of Edinburgh, farmed the Crown rents of Orkney and Shetland, and it is evidently his son John who is here alluded to. Sir William attained to great wealth; but, coming to misfortune through his fidelity to King Charles I., in the troubles which overwhelmed that monarch he lost his all, and died miserably in prison. From him are descended the family of Dick-Cunyngham of Prestonfield, Baronets. In 1675 Captain Andrew Dick was made Steward and tacksman of the Crown rents, and the name was continued in the islands for about a century later, by the family of Dick of Frackasfield and Wormidale, now locally extinct.

II. DUNROSNES SCAT WODMELL BUTTER AND OYLLIE.

Scatnes, viij s viij d lea^r Goit the 3 part Tenentis the 2 part.

Clunlie and Trosweik and Lugasetter, vj s iiij d.

Scowsburgh, vj s viij d lea^r.

In a number of the parishes *Conquest Land* and *Conquest Landmeallis* are enumerated, as also *Kirk land meallis*. *Corn Teynd*—butter and oil—is occasionally quoted.

There are then given—(1) *The Umbothes* (or *Umboth Duties*); (2) *Wattle, Ox, and Sheep Silver* of each parish and isle; (3) *Rentall of the Wattill as it was in anno 1605*; (4) *The Rentall of the Lawting Oxen and Sheep of Yetland gevin up to Mr Wm. Levingstoun, Scheref deput and Chamerlane in anno 1615*; (5) *The Rentall of the Peattis yeirlie to be casten won and led to the Castell of Scalloway conform to ane warrand direct to Alexr. Bruce and preceptis to the Foudis datit at birsay the 20 of feb. 1604*; (6) *The Holms and ylandis in Yetland extracted out of the Bischopis rentall productit to the Exchequer in Novr. 1612 and subscribit be Andro Edmonstoun minister at Yell*; (7) *Rentall of the Bishopis Umbothis*; (8) *Rentall of the Conquest landis in Yetland be my lord in anno 1604. 27 June 1604.*

This list of contents of the Rental of 1628, even without quotation of details, is more than sufficient to indicate its importance. It is indeed a standard for estimating the state, in the beginning of the seventeenth century, of the Lordship of Shetland, and of the local weights, measures, and duties, which latter have been involved in confusion both before and after that time. It is impossible here either to give details or to analyse them, but a few special points may be referred to:—

(a) **UMBOTH DUTIES.**—These were the Bishop's revenue from Shetland. In 1577 a complaint was brought before the Privy Council by Barthill Strang of Voisgarth in the island of Unst, against Lawrence Bruce of Cultemalindie, for compelling him to pay the bishop's duty called the "bishop's umbois in Zetland" three months before the term (*Register of the Privy Council of Scotland*, vol. ii. p. 648-9). Etymologically the word *Umboth* (old Norse, *Umboð*) signifies administration by a delegacy, the duty having always apparently been collected by a representative of the absent bishop. According to Gifford (*Historical*

Description of Zetland, p. 173), the *Umboth* duties comprised one half of the corn tithes of every parish, except the united parishes of Tingwall, Whiteness, and Weisdale (which formed the Archdeanery of Shetland), and were payable in butter, oil, and occasionally money. This explains how it came to be that only one half of these tithes came to the vicars of the parishes; that is to say, the corn tithes (*decimæ rectoriæ*), which properly belonged to the parson or rector, were divided equally between the bishop and the parochial clergyman; and the bishopric revenues of Shetland having been acquired by the Crown, by excambion with Bishop Law in 1614, the one half belonging to the bishop (*i.e.*, the *Umboth* duties) then became, and still remain, part of the revenue of the Lordship, in the possession of the Earl of Zetland.

(b) WATTLE.—In the complaints against Lawrence Bruce of Cultermalindie (1575),¹ which contain the earliest reference I have seen to this duty, no explanation of its character is given. The complaint in regard to it is stated thus:—

“It is lamentit be the said auld Lawrichtmen that quhairas of the law and consuetude of the cuntrie in all tyme preceadand the Lairdis entres, the Comownis payit thair dewities, callit wattill upon thair Lawrichtmanis bismeyre, be aue nummer and calculation callit merkis. Quhairas the Laird now compellis thame to pay the same in guddin-taill upon the Dutche bismeyre, quhilk is thre or four merkis mair nor just,” &c.

Founding upon etymological considerations, Mr Balfour's Glossary to *Oppressions in Orkney and Shetland* defines this duty as (Norse, *Vottr-tel*) “the ancient assessment for the salary of the Under-foud for summing up the evidence at the Vard-thing, afterwards a perquisite of the Bailie.” Gifford, writing in 1733,² explains its derivation as from the Danish words *nuit laugh*, *i.e.*, a night laying, arising from the circumstance of a certain saintly matron having at one time been sent over from Orkney by the Bishop, with the assurance that her lying but one night in each parish would be followed by abundance of corn and fishing, a small sum

¹ *Oppressions in Orkney and Zetland in the Sixteenth Century*, by D. Balfour of Balfour, p. 63.

² *Historical Description of the Zetland Islands*, Reprint, 1879, p. 57.

being paid to her yearly from each parish in recognition of these blessings. Absurd as this story, adopted by all subsequent writers, may seem, there would yet appear to be a substratum of truth in what is implied in it, in so far as *night-lying* is concerned.

In the present Rental of 1628 this duty is entered as so many "*night's wattle*." Thus:—

Easter Quarff, 1 nyghtis wattill.

Summa [for Burray], 4 nyghtis wattill and 6 merkis.

This seems clearly to suggest *lodging*, night entertainment, probably the equivalent of *conveth*, or waiting (*Waitinga* of Latin charters) in old Scottish deeds, known also in Irish as *Coinmheada*. In modern Danish *nat-leie* is the term for night quarters; but the transition to *wattle* is, it must be admitted, not very natural or obvious. In the time of the Stewart Earls the inhabitants were held bound to "flit and fure," that is, to transport and convey, the Earl, his Chamberlain, and attendants, from place to place, a burden which was remorselessly exacted, usually without remuneration. In passing through the country, free night quarters were usually extorted in the same way. Adverting to Mr Balfour's explanation that the wattle was a payment for the Foud, or Bailie, it is quite conceivable that it might in the same way have covered expenses of night quarters for the Foud and his attendant officers at meetings of the Lawting or parish courts, though no direct evidence of this appears to be preserved. Whatever the origin, the duty grew in the course of time to be a permanent burden.¹

Grassums, called also Eistercowp (*Eysetter-caup*) and Landsettertown,

¹ Subsequent investigation has convinced me that the explanation of the origin of wattle, suggested above, is not without support of evidence. In the *Diplomatarium Norvegicum* (vol. ii. part 2, p. 466) I find a deed (No. 623) by King Erik, the Pomeranian, dated at Lund, 15th April 1412, in which he grants to his trusty servant, Alexander van Klapam, all his lands in North Maben in Shetland—"Alt vaart godz sem ligger uppa Hieltiland for nordan Mawed huiliket plæger att skyllda ok gifua tiu loduga marker til skat landskyld ok wesel," &c. The terms "skat, landskyld ok wesel" here used as expressing the dues (10 merks in all) exigible from the property can, I think, be rendered only as *skat*, *land-rent*, and *night-quarters*. The word *wesel* seems to be, in its original form, the old Norse *Veizla*, *veitzl*, thus defined in the Cleasby-Vigfusson Dictionary:—"As a law term, *the reception* or

recognised burdens at the time of the Complaints against Cultemalindie, do not appear to be alluded to in this rental. They had probably not as yet become of such frequent and oppressive exaction.

(c) SHEEP AND OX MONEY.—This has always been quoted as a tax imposed by Bothwell, Duke of Orkney, of an ox and twelve sheep from every parish. Gifford (1733), while relating the story, seems to have had some misgiving as to its genuineness, for he adds—"But it seems rather to be a tax imposed upon the country by Robert and Patrick Stewarts, earls of Orkney, for they were the first that made it an annual payment." Gifford's surmise may now be affirmed to be an ascertained fact. The particulars of its first imposition are given in the Complaints against Cultemalindie, the instrument of Earl Robert's rapacity, in 1576—"It was hevelie lamentit and complenit be the said auld Lawrichtmen of the cuntrie of Zetland, that quhair the Laird of Cultemalindie, sen his entres [1572] hes rasis ane new exaction upon the cuntrie, quhilk was never tane of befor be na Fowde, of certane oxin and scheip yeirlie furth of ilk parochin at the tyme of the halding of the Lawting."¹ Elsewhere "ane ox and twelff scheip" are specified as the exaction.

The terms of the entry in the Rental now under consideration (1628)—"Lawting Ox and Sheep"—conclusively confirm this account of its origin, viz., for the expense of the great Lawting Court held at Tingwall annually; though, like the other exactions, converted into money payment, it continues a permanent burden to this day, though Lawting, Foud, and Lawman have alike vanished for ever.

entertainment to be given to the Norse King, or to the King's 'landed men,' or his stewards, for in olden time the King used to go on a regular circuit through his kingdom, taking each county in turn; his retinue, the places of entertainment, and the time of his staying at each place, being regulated by law. This was called *veizla* or *fara at veizlum*." The term is further described by the lexicographers as "a royal grant, revenue." The circumstances of the case, as here laid down correspond exactly with the position of matters in Shetland in early times, when inns there were none, and manor-houses, in the modern sense, probably as few; only, instead of the King on circuit we must understand the Jarl, or his Foude and officers of court. The transition from *veizla* to *vattle* is easy, and quite in the spirit of the dialects.

¹ Complaints—*Oppressions in Orkney and Shetland in the Sixteenth Century*, p. 51.

The next Rental of the Lordship of Shetland to which I am able to refer is:—

III. ZETLAND SCATT RENTAL, 1716–1717 (Earl of Morton's).

This book brings us down to a century later than the preceding. Its special interest lies in this, that it enumerates by name the individual occupiers of the land who pay the duties. It is thus a record of the whole population (heads of families) in the islands; and, in other respects, it gives an interesting glimpse at the state of society and of the economic conditions prevailing at the time.

I am obliged to Mr Harry Cheyne, W.S., for the original manuscript volume, now exhibited to the Society. Probably the only copy of it in existence is one made by myself for my own collection several years since. It is in size foolscap folio, without title, but bearing the following explanatory note on a fly leaf at the beginning:—

“This Rental is holograph of Thos. Gifford, Esq., of Busta,—and is presumed to be a copy of the Rental or Count Book for 1716 referred to by Mr Balfour in the Rental of the Lordship prepared by him in 1773, and partly from that of 1716.

“This copy was found by the subscriber among the papers of the late James Cheyne of Tangwick, and for the sake of preservation bound up by Henry Cheyne of Tangwick, Writer to the Signet, in the year 1840.”

As the contents are now of public, rather than private, interest, a befitting place of deposit for the volume would be the Historical Department of the General Register House, where so many documents of importance relating to the islands are preserved.

Thomas Gifford of Busta, a leading man in Shetland during the greater part of last century, was Stewart-Depute of the islands, and Lord Morton's Chamberlain or Factor for the Lordship, as his father John Gifford had been for many years before. He was the author of the *Historical Description of the Zetland Islands* (1733), more than once referred to in the present paper.

The Rental comprises (I.) *Landmaills* and *Grassums*, being (A) Rental (and entry money) from lands belonging in property to the Crown, and (B) duty payable for lands held in feu from the Crown or from

the Crown's substitute; (II.) SKAT, with WATTLE, Ox and SHEEP MONEY, levied upon the whole lands in the country, with the exception of a few specified holdings quoted as "never in use of payment." These holdings are unquestionably *Setterlands* or *outsets*, improvements, in later times, from the *Skathald*, or common, and therefore independent of the old allocation of Scat. The ancient duty *Leanger* also reappears occasionally.

The following extracts will serve as specimens of the Rental, under the separate heads of Scat, Landmalls, &c., &c. :—

PARISH OF DUNROSSNESS.—(I.) SKAT.

	[Land.]	[Butter.] Lispunds.	Merks.	[Oil.] Cana.	£	s.	d.	[Scots.]
SCATNESS, 144 merks. Scat,		4	...	16	11	8	0	
[Defaced, but in all such cases	14	0	0	
"Wattle, Ox and Sheep money,"]	4	4	0	

allocated thus :—

Scotshall, p. himself	£ Scots	s.	d.	Brought over, 103 marks	£32	12	4
and tenants 47 merks is	14	17	8	John Irving	6	"	1 18 0
Jn. Johnston 6 "	1	18	0	Got	8	"	2 13 4
Grisell Fordyce 22 "	6	19	4	Bigtoun	8	"	2 13 4
Wm. Sutherland 10 "	3	3	4	John Lisk	5	"	1 12 4
Rot. Mudy 6 "	1	18	0	Scoland	8	"	2 13 4
Jno. Alison 6 "	1	18	0	Hend. Nicolson	3	"	0 19 0
Sumbro 6 "	1	18	0	Wm. Hay	3	"	0 19 0
Forward, 103 "	£32	12	4	144 merks.	£45	12	0

(II.) LANDMAILLS [Feus].

		[Butter.] Lispunds.	Merks.	£	s.	d.
SCATNESS	67½ merks [land] pays	22	12	28	0	0
Feud by Quendall thereof	14 "	4	16	5	12	0
charged to his acct. pays						
Feud by Sunburgh	24 "	8	...	9	12	0
Bigtoun fuer of	10½ "	3	12	4	4	0
Grizel Fordyce fuer of	6 "	2	...	2	8	0
[defaced]	2 "	...	16	0	16	0
[defaced]	11 "	3	16	4	8	0
67½ summa.						

(III.) LANDMAILLS [Rents and *Grassums*].

		Lispunds.	Merks.	£	s.	d.
VADSGARTH (Kuningbrogh)	8 merks 6 ures propertie land	2	16	3	4	0
	Grassums thereof is			3	4	0
Helen laurence daughter	5 merks, pays	1	16	4	0	0
Malcom halcro	3 merks, pays	1	...	2	8	0
OKRAQUOY	6 merks 8 ures propertie land	...	8	0	8	0
	Grassums thereof	...	...	0	8	0
Laurence Bain	6 merks, pays	2	10	5	6	0

The following account exhibits the results as regards the entire parish of Dunrossness (including the parishes of Sandwick and Kunningsburgh, then, as now, united with it), showing the rate of conversion of the butter and oil payments into Scots money :—

DUNROSSNESS.—Wholl Charge of Landmailles buter and Wadmell payable to the Right honourable the Earl of Morton yearlie, inclooding the Grassums of the propertie lands as contained on the 1st and 2nd pages of this Book extendeth to

	Lispunds buter.	merks.	£	Scots	s.	d.
	196	10	261	2	0	
The feu duty of the Fair Isle			133	6	8	
The Umboth duty			407	0	0	
The Scat, Watle and Ox penny—						
Dunrossness, 3 united parishes as						[Cans oil.]
on folio 11, amount to	57	8	205	334	11	0
The whole Rent	253	18	205	1135	19	8
223 lispunds buter & 18 mrks at 30 sh. p. lispund is				380	11	0
205 cans of oill at 6 sh. p. can is				61	10	0
Extent of the Wholl in money [sic]				£1583	0	8

A large portion of this is entered as “Retentions,” *i.e.*, non-payments on account of lands being “ley and Wasted,” and on other grounds (figures of the totals partially defaced). In the detailed rental these retentions ” are carefully noted.

The Book concludes with the following :—

Generall Computs of the Crownrents of Zetland.

The propertie and fewed Crown lands.			Udel land.
	Propertie land.	Fewed land.	
Dunrossness,	64½	482½	1203
Fair Isle, . . . . .	...	96	...
Burray Isle, . . . . .	...	100½	152
Gulberweck,	63½	28½	241
Brasay and Noss, . . . . .	...	22	332
Tingwall and Trondry,	140	79	648
Whitnes, {	109½	33½	572
Wisdall, {			
Aithsting, {	83	91	569
Sandsting, {			
Walls,	20	33	385
Sandness, {			188
Papa, { . . . . .	...	...	216
Ffouilly, {			18
North Maven,	72	124	829
Delting,	19½	223½	623
Nesting, {	22	64	424
Lunasting, {			
Qhalsay,	41½	...	178
Skeries, . . . . .	...	15	39
Unst,	389	33	1627
Uya, . . . . .	...	...	84
fjetlor, {	198	42	544
No. yell, {			
Yell { So. Yell,	37	24	580
Yell { Mid Yell,	50	57	910
	1309½	1587½	10262

The summations are not strictly accurate, and the figures given do not entirely correspond with the detailed lists of each parish. The differences are probably accounted for by the deductions for "ley lands

and retentions," a considerable item in every parish. A column for the totals of "Scat, Watle, Ox and Sheep money," payable by each parish or district, is prepared, but not filled up. From a careful analysis of the detailed rentals these figures might yet be supplied.

The total area of cultivated or occupied lands in Shetland is given as 13159½ merks as against 13392 merks in the Rental (No. II.) of 1628, showing a diminution in 88 years of 233 merks. The variations and uncertainties, however, in these Rentals, which it must always have been difficult, if not impossible, to avoid in recording the minute details of such an enormously extended and scattered area, together with the destruction of portions of the soil by sand-blowing and exhaustion, are such as to make an attempted analysis of the differences of doubtful value. The relative extent of the different kinds of land tenure in the islands, viz.:—

Property land of the Lordship,	. . .	1309¾ merks
Feued land,	. . . . .	1587½ „
Udal land,	. . . . .	10262 „
		<hr/>
		13159½ merks

is now given in this Rental for the first time, so far as I am aware, and is of great importance as a test of the result of the efforts, during the preceding century and a half, to subvert the ancient udal system, and to impose feudal tenure, with feudal burdens and restrictions, in its stead. So successful had these persistent efforts been that by the time in question (1716) more than an eighth of the ancient udal lands of Shetland had been entered under feudal charters, granted either by the Crown or by the grantees of the Earldom and Lordship. At the same time, the property lands of the Lordship are shown to be about a tenth of the whole occupied area of the islands.

The Rental contains also copies of the accounts for the year against a number of the principal landholders. One of these, quoted as a specimen, will serve to complete the present notice :—

Dr JOHN SCOT of SCOTSHALL, for Superior duty payable to the Right
honourable the Earl of Morton, Cropt 1716 payable 1717.

		Butter.				
		Lispunds	Merks.	£	s.	d.
11 merks in Berwick propertie landmaills, . . .	5	12		6	12	0
Grassums thereof, . . . . .	...	...		4	8	0
Scat & Watle of 31½ merks thair is . . . . .	...	...		15	4	6
18 merks 6 ures feud land in Aith is	6	...		7	4	0
Scat of 54 merks thair is . . . . .	...	...		13	4	0
Scat of 47 merks in Scatnes . . . . .	...	...		14	17	8
Scat of 48 merks in Exnaboe . . . . .	...	...		16	0	0
For Helen Laurence daughter in Vadsgarth labour of the propertie lands thair . . . . .	...	...		9	8	8
Nicol Halcro Levenweck for Scat . . . . .	...	...		3	0	0
James Imbler, Oxensta, for Scat . . . . .	...	...		2	0	0
Grisell Strang thair for Scat . . . . .	...	...		1	0	0
Of the Earls' buter taken up by him from the persous following, viz.,						
Margret Halcro Cuningsburgh . . . . .	...	12				
James Jarnison ther	1	12				
Laurence Halcro ther . . . . .	...	11				
Simon Malcomson ther . . . . .	...	21				
To the Landmaills of 11 merks fued land in Scatnes bought for his nephewe Jno. Scot from Laurence Strang and now possessed by him . . .	13	16		4	8	0
	18	11		£97	6	10
				[Scots.]		

It is apparent from this and other similar accounts that, while the occupants of the land are usually specified, with the duties due by each, the duties had, at any rate to a large extent, ceased to be collected from the individual payers, and been made a charge against the land-owners, recoverable by them, along with their own land rents, from the tenants. The collection by the Crown, or its donatory, of the rents and duties in kind, or partly in money and partly in kind, from individual tenants, must have been an intolerable and most expensive process.

The three Rentals above described are the only complete Rentals of the Lordship of Shetland I have had access to. There is, however,

another, 62 years later, comprising particulars of perhaps one-third of the extent of the Lordship.

IV. SKATT BOOK, &c.

For the Ministries of Dunrossness, Bressay, Gulberwick, and Tingwall.
Crop 1778-1779.

The more detailed title is "A Rental of Dunrossness Ministry, showing the Feu'd and Sir Laurence's Property Lands in each Room, with the names of the Present Feuers, and also all the sundry other Proprietors who at present possess Lands in each Room."

This is a use and wont Rental, for the districts mentioned, supplied to the local collector or tacksman (apparently the then Mr Bruce of Sumburgh), for Sir Laurence Dundas, who had some time previously acquired the Earldom and Lordship, as formerly stated. This is seen from the note of direction given at the beginning:—

"*N.B.*—The Labourers will not give more for Scat than they have been annually in use to pay, which has been only money. Therefore, Mr Bruce, like Mr Balfour, must in the meantime take the common use and wont, which is as stated in this account."

This note may be by Sir Lawrence, or by his Chamberlain in Shetland at the time.

The original Rental is in the possession of Mr Bruce of Sumburgh, at Sand Lodge, by whose permission I made a copy of it some years since. It is a small volume, foolscap folio, about 12 inches \times 7 $\frac{1}{4}$. The skeleton, or framework, *i.e.*, the ruled columns, headings, and principal place-names, appear to be the work of a clerk, copying from a former similar Scat-Roll—that of Craigie (1747) is specially alluded to. The names of the tenants, the extent of their holdings, the duties payable, and certain accounts and receipts, appear to be in the handwriting of the laird of Sumburgh. Statements of rental, duties, and explanatory notes, on four pages (75, 76, 77, 78) are apparently by Robert Hunter of Lunna, and initialled by him "R. H."

This Scat-Roll contains (I.) a Schedule for the whole district embraced in it, in columns as follows:—

Number of Merks in each Room.	Names of Rooms and Feuers.	Feu'd Lands.	Udal Lands belong- ing to each Heritor.
----------------------------------	-------------------------------	--------------	--

A consecutive list (II.) of the various "Rooms," or townships, is then given, with the extent, and the duties of "Scat and Watle, &c.," as allocated to the occupants, who, in many cases, are specified by name; and (III.) copies of the accounts charged against several of the larger heritors.

A comparison of this Rental (1778) with the preceding one of 1716, would show the changes that had taken place in the course of the 62 years intervening—what new land had been added for rental purposes, and what had ceased to be chargeable with duties, as, for example, the lands of Lie in Dunrossness, 27 merks, stated in the latter Rental to be "ley or gevin down by him [Robert Sinclair of Quendale] to the tenents becauss of being blasted with sand. The Scat thereof is £12, 3 shillings." But such an investigation would be out of place here, the object of the present inquiry being more general. It may, however, be worth while to transcribe the particulars of the Scat, Wattle, &c. of a single township, Scatness in Dunrossness, especially as similar particulars of the same place have been given from the Rental of 1716. The extent—144 merks—is the same at both dates, and also the gross charge, £45, 12 Scots, but of this only £36, 8s. 4d. is apparently recovered, 29 merks being given as "ley" or not sufficiently laboured:—

SCATNESS.—144 merks @ 6s. 4d. per merk is		£45 12 0 Scots.
15 merks	Mrs Strong in the Hays,	£4 15 0
11 "	Mr John Strong, junr., Virkie,	3 9 8
5 "	Mrs Mercer,	1 11 8
3 "	John Archibald,	0 19 0
3 "	John Leisk,	0 19 0
12 "	Peter Halcrow,	3 16 0
16 "	Mr William Bruce, Bigtoun,	5 1 4
4 "	John Stout,	1 5 4
6 "	Robert Alison,	1 18 0
Carry forward,		£23 15 0

		Brought forward, £23 15 0
3 merks	Alexander Aitkin,	0 19 0
3 "	William Aitkin,	0 19 0
3 "	Marjory Grott,	0 19 0
9 "	Sumburgh,	2 17 0
6 "	John Shewan,	1 18 0
3 "	Robert Leisk,	0 19 0
4 "	William Stout,	1 5 4
3 "	Thomas Moodie,	0 19 0
6 "	Thomas Hay,	1 18 0
115 "		£36 8 4
29 "	appears to be ley or laboured for 2s. 3d. and 1s. 10d.	
144 "		

It will be observed that payments in kind are not here quoted, only the usual money payments; the skat, watle, &c., being reckoned in this instance at 6s. 4d. Scots per merk, but varying in each separate township. In the accounts rendered to the heritors, something like the old system is followed, with the full specification of payments in money and in commodities, thus:—

DR. JOHN HALCROW in Hoswick.

For Feu duties and Scat, &c. for Crop 1777, payable 1778.

10 merks in Hoswick paying for Landmaills 4 lispunds and	
10 merks Butter, and in money,	£5 6 [Scots.]
To 4 lispunds and 10 merks Butter @ £4, 4s. per lispund is	18 11
To Wattle, &c., of do. @ 1s. 6d. per merk	0 15
	£24 12

Again:—

DR. ROBERT ALLISON.

For Feu Duties and Scat, &c., Crop 1777, payable 1778.

6 merks in Scatness paying for Landmaills 2 lispunds Butter	
and money @ 8s. per merk is	£2 8
To 2 lispunds Butter @ £4, 4s. per merk,	8 8
To Scat of do. @ 6s. 4d. per merk,	1 18
	£12 14 [Scots.]

The lands in those two instances are *feued*, paying *landmaills*, with Wattle in the one case, and Skat in the other, superadded. In other

instances the Skat and Wattle are charged on Udal lands only, feud lands having their own distinct charge of butter and money. The practice seems to be varying, and there is difficulty in finding any uniform principle. *Umboth* duty, the old revenue of the Bishop, but possessed by the Crown or its substitute since 1614, is sometimes charged in slump to larger heritors. In most cases it is not specified.

While the foregoing are the only detailed Rentals to which I can refer, it appears that there is extant, and I presume in the possession of Lord Zetland, a Rental of the Lordship for the crops 1655 and 1656. Reference is made to it in a portion of the printed process, *Spence v. Lord Dundas* (Division of Scattald of Haroldswick), 1836. It is there stated that "there is good reason to believe it to be in the handwriting of Thomas Lesslie of Burswick, afterwards of Ustanes, then Chamberlain and Collector of the Crown rents of Shetland, and it was recovered from among his papers in the keeping of his grandson. It appears to have been intended as the charge against himself in his factory accounts for these crops. It is complete, and though sometimes inaccurate in computation, exhibits very distinctly every branch of the duties payable to the Crown." It is doubtless upon the authority of this Rental, or of others following upon it, that Gifford's Rental of 1716, described in preceding pages, was founded.

In the Earl of Zetland's estate office in Edinburgh, there are continuous Rentals brought down from the carefully prepared Rental of 1772 to the present date, and the Messrs Dickson, W.S., his Lordship's agents, are most kind in affording any information of public importance contained in these. They are, however, private property, and have no occasion to be imported into an inquiry of purely historic interest, unless for the sake of explanation or illustration. I may, however, be permitted to transcribe the following statement of the total revenues of the Lordship from a private Act obtained by Lord Dundas in 1812. The Act (52 George III. c. 137) is titled "An Act for enabling the Right Hon. Thomas, Lord Dundas, to sell certain Feu and Teind Duties and Casualties of the Earldom of Orkney and Lordship of Zetland, upon entailing lands equivalent in value thereto," 9th June 1812. The statement is a copy of Schedule B. attached to it.

Names of Parishes and Islands.	Fen and Umboth Duties.				Scatt, Wattle, Sheep and Ox Money.			Total Annual Value.
	Oll.		Scots Money.		Oil.	Butter.	Scots Money.	
	Barr.	£ s. d.	£ s. d.	£ s. d.				
Names of Tackmen.	Barr.	£ s. d. <td>Mks.</td> <td>£ s. d. <td>Canna.</td> <td>Lispda.</td> <td>Mks.</td> <td>£ s. d. </td></td>	Mks.	£ s. d. <td>Canna.</td> <td>Lispda.</td> <td>Mks.</td> <td>£ s. d. </td>	Canna.	Lispda.	Mks.	£ s. d.
	£ 2.	£ 3.	18.	9s.	9d.	4d.	½	
Island and Parish of Unat,	44	14	65	10	0	314 5 3
Island of Yell.	35	2	42	2	0	49 2 10½
Umboth Fen Duty now fixed at £8, 2s. 3½d. sterling,	97	7	6	6 13 2½
Island of Fedlar,	29	21	35	17	0	45 0 1
Parish of Northmaine,	65	18	280	2	0	69 18 4½
Seetling, Lomastang, Wha-	£	£	80	7	122	6	0	40 6 4½
say, and Skerries,	4	90	73	16	0	15 12 9½
Whitenys and Weisdale,	31	22	38	6	0	37 0 6½
Thingwall Parish,	6	...	14	4	0	9 1 0
Sound, Gullerwick and Quarf,	21	6	50	14	0	45 5 4
Islands of House, Burra, and Havro,	10	2	12	2	0	21 3 8½
Island of Bressay,	3	139	2	755	4 8	13 3 2½
Dunrossness, Sandwick and Cunningsburgh,	24	6	...	154 13 4½
Atthingst and Sandating,	53	12	67	16	0	52 13 5½
Walls, Sandness, Papa and Foula,	14	10	49	6	0	28 4 3½
Umboth Duty of ditto, now fixed at	71	12	9	4 18 7
Parish of Delting.	75	22	206	10	0	62 10 5½
Total,	£	5	562	14	1981	15	11	670 11 6

Total annual value as above, £ 670 11 6

Deduct Crown Fen Duty and Land Tax payable from the above, £ 253 13 9

Net value for one year, £ 416 17 9

**Total annual value as above,
Deduct Crown Feud Duty and Land Tax payable from the above,
Net value for one year.**

This vidimus of the position of the Lordship duties—the now obscure ancient imposts—brought down almost to our own day, with little change, is of much interest. While the old payments in kind continue to be quoted, doubtless with as rigorous exactness as the circumstances admitted, it will be observed that they are computed at a fixed money value, and the total revenue is brought out in £ s. d. Scots, converted into sterling money.¹

About sixty years ago the duties were to a large extent bought up by the proprietors of the lands liable, so that the amount now leviable is inconsiderable. From a copy of the Rental of the duties, described as *Feu, Scatt, and Umboth Duties*, for Crop 1865, payable at Lammas 1866, kindly shown to me by Mr George H. B. Hay of Hayfield, Lord Zetland's representative in Shetland, it appears that the total sum remaining payable from the islands then amounted to only £88, 2s. 11½d. In every case, the payments are reckoned in Scots money, converted into sterling. The *Feu* duties are partly in money, and partly in butter (*dispunds* and *merks*); the *Scatt* is in money only, except in the one parish of Walls. *Umboth* duty is charged only in two parishes, viz., for Dunrossness, in one sum paid by one proprietor £170, 4s.; and for Walls, in the same way, £71, 12s. 9d., both Scots

¹ It is not consonant with the purposes of the Act of 1812 to refer to lands held by Lord Dundas under deed of entail; but Schedule C. attached to the Act gives those in Shetland held in fee simple, which are stated to be the Island of Oxna, and parts of Fracafield, &c., occupied by small tenants, with rental estimated at £40 sterling.

Schedule A. gives the aggregates of the duties of the Earldom of Orkney. The mere headings of the columns are worth while being quoted, to show the radical difference in the nature of the payments in kind in Orkney from that of the payments which we have traced from time immemorial in Shetland. The headings are—

Butter, £5, 2s. 7d.	Sterling Money, £ s. d.
Oil, £2 per barrel.	Poultry, No. at 6d.
Bear [coarse native barley] at 6s. 1½ per	Peats, Fathoms at 6s. 8d.
Meil.	Straw, Loads at 4d.
Malt at 15s. 6½d. per Meil.	Swine, No. at 10s.
Meal, £10, 8s. 5½d. per Meil.	Total in Sterling Money.

The general total is given as £3182, 10s. 7½d.—less Public and Parish Burlens, £762, 2s. 6d. sterling.

money. The price of butter (when not paid in kind) varies according to the state of the market. In 1866 it was charged at 21s. 4d. per lispund; at present (1885), Mr Hay informs me, the price is 32s.

While the ancient traditional duties leviable from the Lordship of Shetland have been largely augmented from time to time in the course of many centuries, the amount retained in the hands of Lord Zetland is only a fraction of the aggregate in former times. I am glad, however, to point out that the remnant of the old heritage of the Jarls, the *property lands* belonging to the Earl of Zetland, are still considerable. The present extent of these lands is 895 merks 2 ures, lying in the following parishes, viz.:—

In Unst,	289 merks 0 ures.
„ Fetlar,	155 „ 2 „
„ North Yell,	49 „ 4 „
„ Mid and South Yell,	24 „ 0 „
„ Nesting,	11 „ 4 „
„ Sandsting and Aithsting,	36 „ 0 „
„ Tingwall, Whiteness, and Weisdale,	220 „ 0 „
„ Lerwick and Gulberwick,	31 „ 4 „
„ Quarff,	78 „ 4 „

895 merks 2 ures.

The annual value is (1885) £995, 2s. 10d.; so that his Lordship still retains a substantial interest in the islands.

In Orkney, the landed estate of the Earldom is a valuable one, the annual rental being stated in the parliamentary return of 1872–73 at £5617, 17s.

The main purpose of this paper is served by the description in the preceding pages of Rentals, hitherto unpublished and practically unknown, of the Lordship of Shetland, and I trust that the result will be of some permanent value. I am able at the same time to refer to some Rentals of the Earldom and Bishopric estates and revenues in Orkney, which are not included in Peterkin's series, and are not elsewhere described. These are—

I. COMPT OF THE EARLDOM, 1612.

II. COMPTS OF TACKSMEN OF THE DIFFERENT PARISHES OF ORKNEY, 1612.

III. ACCOMPT OF JAMES BISCHOPPE OF ORKNAY OF ALL THE RISAITTIS AND INTROMISSIONS HAID BE HIM, 1611.

These three are all preserved in the General Register House, where they are available for purposes of historical inquiry.

IV. THE RENTALL OF THE BISHOPRICK OF ORKNEY.—This Rental contains the names of the lands and their occupants, and the duties payable in the following parishes, viz.:—Sandwick, Stromness, Holme and Paplay, Orphir, St Olla, Shapinshay.

An interesting comparison might be instituted between it and the other Rentals of the Bishopric published by Peterkin, to which it bears a close resemblance. Walls and Hoy, usually included in lists of the Bishopric parishes, are omitted. No date is given, but among many persons referred to we find the names of such prominent individuals as Arthur Buchanan of Sound and Patrick Græhame of Grahamshall, who flourished about the middle of the seventeenth century. The Rental is a neatly penned manuscript of that period and is now in my possession.

V. COMPTING RENTAL OF THE EARLDOM OF ORKNEY, 1740.

This is also in my possession. It is incomplete and mutilated, several pages having been torn out. The nominal pagination is 1–262. Up to 1820 it was in the hands of Mr George Ross, son of Andrew Ross, Chamberlain of the Earldom about the middle of last century. It contains the “Particular Accompt made with the Vassals and Tennents” in the following parishes, viz.:—St Olla, Firth, Stenness, Harray, Rendal, Evie, Birsay, Deerness, Rousay, South Ronaldshay, Stronsay, Sanday, Westray.

The usual payments consist of the following, viz.:—Butter (barrels, lispunds, merks), Malt (meils, setteins, merks), Meal (meils, setteins, merks), Money, Poultry, and Oil. Peats, Straw, and Swine, enumerated in the schedule annexed to the Act of 1812, seem not to appear. *Scat* silver and *Wattle* are quoted, though it has been sometimes stated that the latter exaction was unknown in Orkney.

MONDAY, 11th May 1885.

G. H. M. THOMS, Sheriff of Caithness, Orkney, and Shetland,
in the Chair.

A Ballot having been taken, the following Gentlemen were duly elected :—

FELLOW.

CHARLES BRUCE, J.P., Mount Hooly House, Wick.

CORRESPONDING MEMBER.

CARLOS ALBERTO MORSING, C.E., Rio de Janeiro.

The following Donations to the Museum and Library were laid on the table, and thanks voted to the Donors :—

(1) By Miss JESSIE KNOX SMITH, Manchester.

Dagger-Blade of iron, single-edged, with thick back like an ordinary Highland Dirk, the blade 10 inches in length, with a tang of 2 inches.

Finger-Ring of bronze, being a thin flat strip of metal about $\frac{1}{8}$ th inch in width, bent to a circular hoop.

Hollow Disc or Mounting of bronze, $1\frac{1}{8}$ inch in diameter, the hollow on the back $\frac{1}{4}$ of an inch in depth, the exterior rim also $\frac{1}{4}$ of an inch in height, and with two notches in the lower part opposite each other. The circular top of the disc, which is slightly raised in the centre, is ornamented with a series of concentric circles in red enamel round a central circular space filled with yellow enamel. The enamelling process employed is that known as *champlevé*, the spaces to be filled by the colouring matter being scooped out of the metal, leaving raised margins of metal between the different hollow spaces of the pattern. In



Enamelled Disc of Bronze,
found in Dun Mac Uisneachan (actual size).

this case the concentric circular spaces are somewhat less than $\frac{1}{8}$ th inch wide and $\frac{1}{16}$ th of an inch in depth, and they are separated from each other by marginal partitions of the metal, having a thickness of about one-third of the width of the spaces enamelled. The scheme of colour seems to have been five concentric bands of red on the top of the disc, and two on the side, with a single spot of yellow in the centre.

The interest of this small object is very great. It is one of a very few examples of the occurrence of this *champlevé* enamel on bronze which have yet been recorded in Scotland; and it adds another example to the evidence of the early practice in Britain of this kind of enamelling, which was unknown to the Romans till after their conquest of Gaul and Britain. The examples which have been found in Scotland have always been associated with the style of decoration now recognised as Celtic, whether of the Pagan or of the Early Christian period. It occurs in the Pagan period upon such objects as horse-trappings and massive armlets of bronze, and in the Christian period on shrines or caskets, brooches, &c., of bronze.

The three articles above described (and now presented by Miss Smith) were found by the late Dr R. Angus Smith, F.S.A. Scot., in the course of his excavations in the vitrified Fort of Dun Mac Uisneachan, near Loch Etive, Argyllshire. They are referred to in his communication to the Society, entitled "Descriptive List of Antiquities near Loch Etive," Parts I., II. and III., in the *Proceedings*, vols. ix. and x., which were afterwards expanded and published separately in a volume, entitled *Loch Etive and the Sons of Uisneach*. London, 1879.

- (2) By Colonel DAVID BALFOUR of Balfour and Trenaby, F.S.A. Scot.

Urn of clay, found on the North Hill of Shapinsay, Orkney.

- (3) By Captain W. GILLON, F.S.A. Scot., 71st Highland Light Infantry, through Professor DUNS, D.D., F.S.A. Scot.

Highland Brooch of brass, $3\frac{1}{4}$ inches diameter. In a note announcing the donation, Professor Duns says:—

"At my request Captain Gillon has kindly presented this good specimen of the plaid-brooch to the National Museum. It is of brass, with steel pin, and ornamented with small concentric circles. It was given to Captain Gillon by 'Noble,' The Mackintosh's keeper, at his Shooting Lodge, Daviot. The brooch belonged to Noble's grandmother, and was believed by her to have been in her father's family long before her time."

(4) By Mr J. W. ROWLAND, 8 Wardie Avenue.

Ten Stone Axes from Secondi, on the African Gold Coast. These implements, which are interesting on account of the rarity of Gold Coast specimens in Europe, were obtained from the side of the hill on which the fort of Secondi is built. Secondi lies within a hundred miles of Cape Coast Castle. The axes are of diorite, and are all of small size, the largest not exceeding $3\frac{1}{2}$ inches in length by $1\frac{1}{2}$ inch across the cutting face. Six of these are very rudely finished, and ground only on the lower part of the implement towards the cutting edge. A seventh is a short wedge-shaped axe, 2 inches in length by $1\frac{1}{2}$ inch in width, ground smooth on the whole surface. The remaining three are remarkable for their nearly cylindrical and slightly tapering form, showing the grinding in as many as twelve to fourteen longitudinal facets.

(5) By Mrs MACLEOD POWELL.

Stone Axe of Algonquin Indians, from Hull Mound, Canada East. It is a chisel-shaped implement of greenstone, $5\frac{3}{4}$ inches in length by $1\frac{3}{4}$ inch in breadth, roughly chipped to shape, and ground to a cutting edge at one end only.

(6) By Dr ROBERT MUNRO, F.S.A. Scot., Kilmarnock.

Spindle, for use with the distaff, of wood and iron, from Brittany. It consists of a bobbin of turned wood 6 inches in length, in the upper end of which is fixed a spindle of iron wire 5 inches in length, with a spiral groove for the thread, which terminates in a slight hook at the point.

(7) By ANDREW MUIRHEAD, F.S.A. Scot.

Ornamental Figure of a Man in cast brass, with a loop attached ; use unknown.

(8) By WALTER GEORGE DICKSON, M.D., F.S.A. Scot.

Phallus of stone, 10 inches in length and $3\frac{1}{4}$ inches in diameter.

Phallus of wood, of similar character, and slightly larger.

Both these Phalli were taken from among a large number of objects of the same description, deposited as votive offerings in a temple at Consei, Toge, near Yumoto, in the province of Kotsuki, Japan.

(9) By ANDREW KERR, Architect, F.S.A. Scot.

Key of the Old Broughton Jail, 11 inches in length, with pipe and loop.

(10) By Rev. JAMES MORRISON, F.C. Manse, Urquhart, Elginshire, F.S.A. Scot.

Nine Flint Scrapers of various sizes, from $\frac{1}{2}$ inch to $1\frac{1}{4}$ inch diameter, of which the two largest are here figured (figs. 1, 2).



Figs. 1 2. Scrapers of Flint, from Urquhart, Elginshire (actual size).

One Side Scraper of reddish flint, $2\frac{1}{4}$ inches in length by 1 inch in breadth, the edge carefully trimmed.

Triangular Arrow-head of greyish flint, partly tinged with red, $1\frac{3}{4}$ inch in length by $1\frac{1}{4}$ inch in breadth, the edges finely serrated, with barbs and stem (fig. 3).

Leaf-shaped Arrow-head of brownish flint, $1\frac{1}{2}$ inch in length, by 1 inch in breadth, the upper edges straight, the lower convex (fig. 4).

All found in the parish of Urquhart, Elginshire.



Figs. 3, 4. Arrow-heads of Flint, from Urquhart, Elginshire (actual size).

(11) By Major THOMAS DUNDAS, through ROBERT DUNDAS, Esq., of Arniston.

Massive Penannular Finger-Ring of gold, flat on the inner side, the outer side beaded, from County Cork, Ireland.

(12) By the Most Hon. the MARQUIS of LOTHIAN, *President*.

Cast in plaster of a portion of a Sculptured Slab at Jedburgh Abbey, bearing scroll-work of a tree or vine, with birds and beasts feeding on its fruit among the branches. At one side is a long panel of interlaced work. The slab is figured in Stuart's *Sculptured Stones of Scotland*, vol. ii. pl. 118.

Cast of a slab with a Roman Inscription, also from Jedburgh Abbey. [See the subsequent communication by Dr Collingwood Bruce.]

(13) By JAMES WATSON, Peebles, the Author.

Examination of Ancient History of Ireland and Iceland; Ireland not the Hibernia of the Ancients; Interpolations in Bede's History, &c.

- (14) By Rev. E. A. COOKE, F.S.A. Scot.

Novum Testamentum Græce, cum Vulgata Latina, &c., et cum præfatione Ben Arisæ Montani. Geneva, 1619 (*imperfect*).

- (15) By CARLOS ALBERTO MORSING, C.E., Rio de Janeiro, through
R. HALLIDAY GUNNING, M.D., F.S.A. Scot.

Itinerario e trabalhos da commissao de estudos da estrada de ferro do
Madeira e Mamore. Rio de Janeiro, 1885.

Series of Photographs of Rock Sculpturings in Brazil.

[See the subsequent communication by Professor Duns.]

- (16) By ALEXANDER HARRIS, F.S.A. Scot.

Inventory of Selected Charters and Documents from the Charter
House of the City of Edinburgh, deposited in the General Register
House.

- (17) By Rev. B. H. BLACKER, the Editor.

Gloucestershire Notes and Queries. Parts 23-26.

- (18) By the MASTER of the ROLLS.

Croniques, &c., par Waurin, 1431-1447; Calendar of State Papers,
Domestic, 1657-1658; Eadmeri Historia Novorum in Anglia;
Chronicles of the Reigns of Stephen, Henry II., and Richard I. Royal
8vo, 1885.

- (19) By THOMAS KERSLAKE, Bristol, the Author.

The Liberty of Independent Historical Research. 8vo, pp. 66.

- (20) By CHARLES A. PARKER, M.D., F.S.A. Scot., the Author.

Notes on a Roman Altar, and on Gosford Church and Churchyard,
&c. 8vo, 1883.

The following Communications were read :--

I.

NOTES ON CELTIC ORNAMENT—THE KEY AND SPIRAL PATTERNS.

BY J. ROMILLY ALLEN, F.S.A. Scot.

The purely geometrical forms of ornament which occur upon Celtic works of art of the early Christian period may be divided into three classes, namely (1) interlaced-work, (2) key patterns, and (3) spiral patterns. The first of these has been dealt with in a previous communication;¹ and it is proposed in the present paper to treat of the two latter branches of the subject.

Celtic art of the Christian period, although it differs materially from that of pagan times, still retains many of the most marked characteristics of the older style, showing that there was no real break in the continuity of the art history of the country resulting from the introduction of the new religion. What is known of the forms of ornament that prevailed in Great Britain during pagan times is derived almost exclusively from the study of objects of bronze, such as shields, helmets, sword-sheaths, horse-trappings, mirrors, armlets, &c., found frequently in connection with sepulchral remains. These objects are either cast or wrought with the hammer, and the decorative features are produced by the form given to the mould used for casting, or by means of *repoussé* work, enamel, and chasing. A preference seems to have been shown for spiral curves of all kinds. Such curves appear to the greatest advantage in *repoussé* work, the effect of light and shade obtained by the continually varying direction of the curve and ever-changing amount of relief and breadth of the raised portion being very pleasing to the eye. It is almost impossible to give any idea by a written description of the appearance produced, but the character of this peculiar style of decoration is well illustrated by the example shown on the accompanying woodcut (fig. 1), which shows a circular bronze disc of unknown use,² now in the British Museum.

¹ *Proc. Soc. Ant. Scot.*, vol. xvii. p. 225.

² Similar discs are to be found in the Museum of the Royal Irish Academy at Dublin (see Catalogue, p. 137).

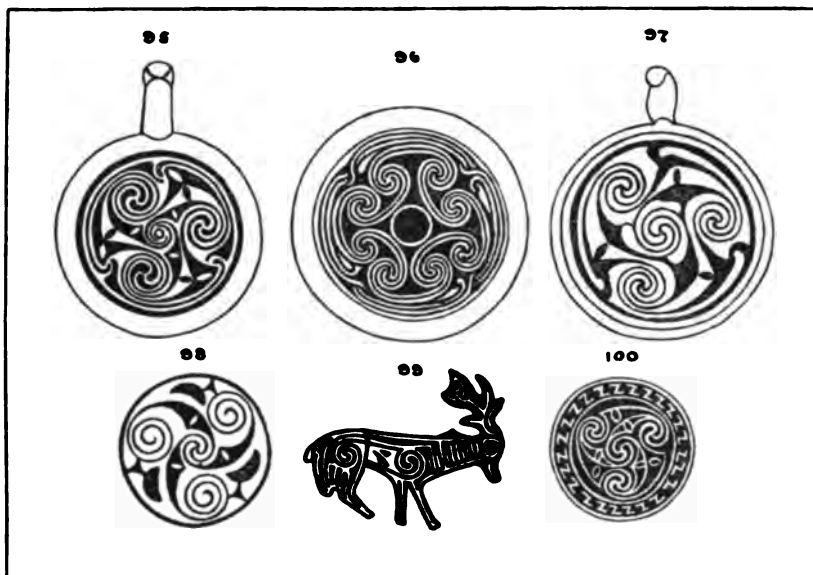
The groundwork of the ornament is a flat surface of metal, the curves being in relief. The section of the raised portion, if cut across, would be like that of a simple form of architectural moulding with a sharp edge, the object of which is to define the curve and separate the bright side from the one in shadow. The curve is close coiled when starting from the centre, but it soon runs off tangentially, the moulding of which it is



Fig. 1. Circular Disc of Bronze (10 inches diameter).

composed gradually expanding and terminating in a little raised lump, the whole having the appearance of the end of a trumpet. This terminal lump catches the light, and looks in shape like an almond. In the spiral-work of Christian times, drawn on a flat surface, this almond shape at the end of the expanded portion is still retained, being shown white on a black ground. As the play of light and shade on an

arch moulding is more beautiful than on a straight moulding, so the subtlety of the effect is again increased when the moulding is on the curve, and also alters its section, as is the case in the Celtic *repoussé* work (see fig. 1). Besides the resemblance just pointed out between the *repoussé* metal-work of pagan times and the ornamentation of the MSS. of the Christian period, there are instances of enamelled circular discs being found whose decoration corresponds still more nearly with



Figs. 95-100. Spiral Patterns in Enamelled Metal-Work.

that of the MSS. It is unfortunate, however, that the circumstances under which these objects have been found give no clue as to their age. In one case the enamelled disc was associated with a burial in a tumulus, the body being uncremated. As, however, mound-burial survived in this country as late as the eighth century, the date of the object in question is doubtful. The following are the instances I have been able to collect of spiral ornament similar to that of the early Celtic

MSS. occurring upon enamelled metal-work. In the year 1788 the Rev. Mr Pegge opened a tumulus upon Middleton Moor, in Derbyshire, in which he found an unburnt body buried on the natural surface of the ground and lying east and west. Near the point of the shoulder of the skeleton was a circular disc of copper $2\frac{1}{4}$ inches in diameter, enamelled with a spiral pattern, and having a hook for suspension (see fig. 97). There were also found in the barrow a broken piece of a buckle or personal ornament enamelled with spirals, and a piece of bronze with a fillet round the edge.¹ These objects were at one time in the White Watson Collection, and were afterwards transferred to Mr Thomas Bateman's museum at Lomberdale House, Derbyshire.²

In the museum of the Warwickshire Natural History and Antiquarian Society, at Warwick, are some relics discovered at Chesterton, near the Foss Way, and presented by Lord Willoughby de Broke, amongst which are four circular discs of bronze ornamented with spiral patterns in red and white *champlevé* enamel. They are in pairs, the discs forming each pair being identical in every aspect. The discs belonging to one pair are furnished with hooks³ (see fig. 95), and the other two are without projection of any kind, and are $2\frac{1}{2}$ inches in diameter⁴ (see fig. 96).

In 1862 an enamelled disc, with a spiral design upon it, was found near the old Tilt Yard at Greenwich, and fell into the possession of Mr J. Brent, F.S.A.⁵ (see fig. 98).

In the British Museum are two enamelled discs of a similar kind, but there being no catalogue of this collection I am unable to add further particulars.

In the year 1860 some labourers, who were digging for brick earth at Lullingstone, in Kent, discovered a bronze bowl, ornamented with pieces of metal cut out into various shapes, and riveted on to the body of the vessel. The decoration consists of figures of stags and birds, together

¹ *Archæologia*, vol. ix. p. 189.

² *Catalogue of Mr Bateman's Museum*, p. 154; and Bateman's *Vestiges of the Antiquities of Derbyshire*, p. 25.

³ *Jour. Brit. Archæolog. Inst.*, vol. ii. p. 62.

⁴ *Jour. Brit. Archæolog. Assoc.*, vol. iii. p. 282.

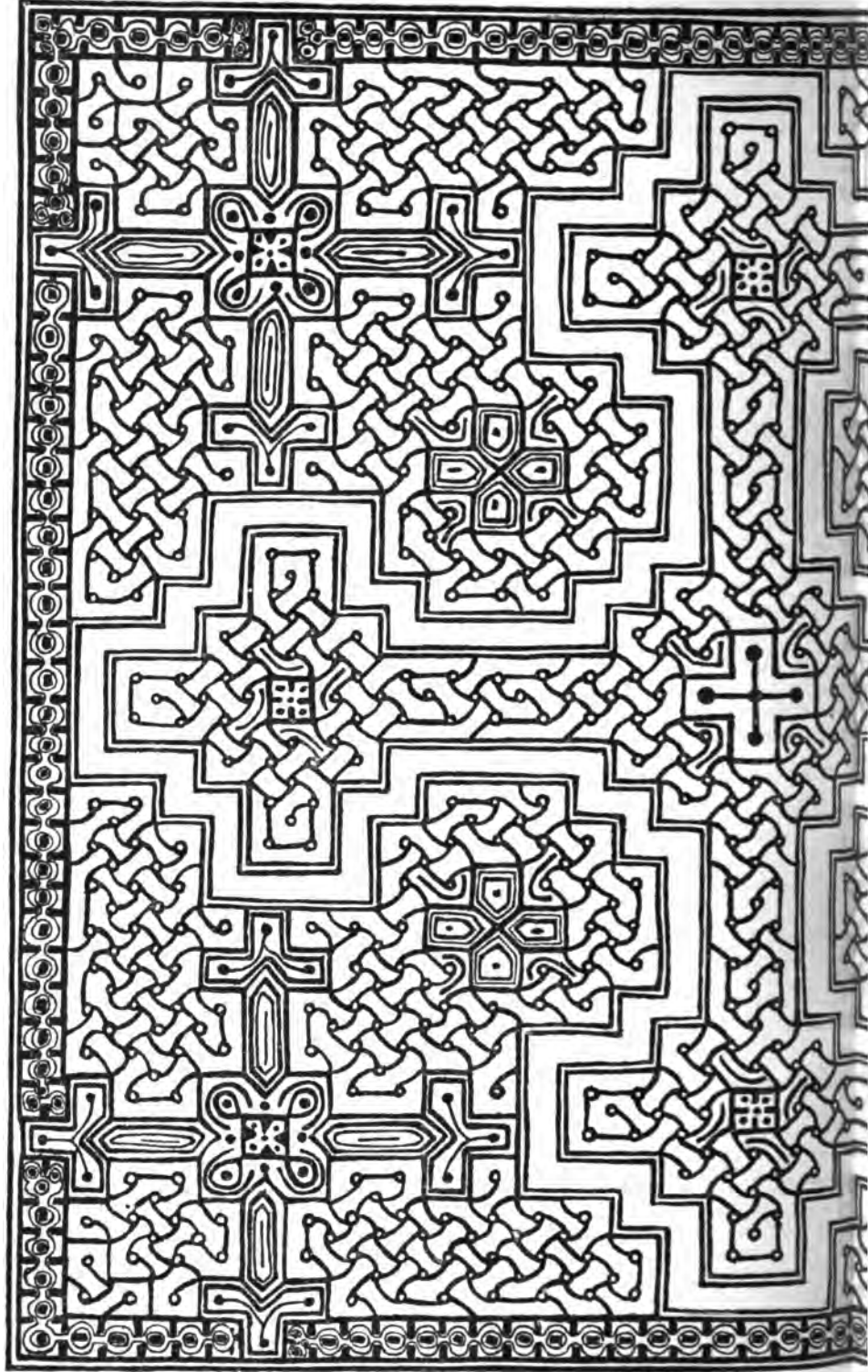
⁵ *Proc. Soc. Ant. Lond.*, vol. ii. 2nd series, p. 202.

SPECIMEN PAGE OF ILLUMINATED NESTORIAN MANUSCRIPT.

(Drawn for Rev. Dr CUTTS by SHAMASHIA JOHANAN, Cousin of the Patriarch.)

Proceedings Soc. Ant. Scot.

Vol. XIX., to face p. 257.



with circular discs having spiral patterns in dull red enamel¹ (see figs. 99 and 100). This beautiful specimen of art metal-work is in the possession of Sir P. Hart Dyke of Lullingstone Castle.²

It has been shown that spiral ornament occurs upon most of the metal-work of the pagan period, and it is possible also that some of the specimens of spiral patterns in enamel are pre-Christian. The other two forms of Christian Celtic geometrical ornament, namely, interlaced-work and key patterns, are not as far as I am aware, to be found on any work of art prior to the sixth or seventh century, and therefore they must either have been developed from simple elements in the country itself, or else the style of art must have been imported from some foreign source. The early copies of the Gospels came from the East, and it is not unreasonable to trace the origin of the geometrical forms of Christian Celtic ornament to the same source. Religion and art are intimately connected, and the introduction of a new religion has always given an abnormal development to art. The two great schools of Eastern religious art are the Buddhist and the Mohammedan, in both of which geometrical ornament plays an important part. Key patterns are used largely by the Buddhists of China, and they are in most instances founded upon the swastika emblem. The most typical ornament of this class is shown on fig. 15B. It is used very largely by the Chinese for a background to act as a foil to the more unconventional and natural parts of the design, much in the same way as the pattern shown on fig. 14 is used on the early sculptured stones of Scotland. The Mohammedans being forbidden to imitate natural forms in their decorative arts, for fear of encouraging idolatry, fell back upon ornamental developments of writing and geometrical patterns of the greatest intricacy, amongst which interlaced-work and key patterns figure largely. The Nestorian Church has preserved from very early times the custom of ornamenting their MSS. of the Gospel with interlaced-work; and some of the cross pages at the commencement of the Gospels produced at the present day might almost be mistaken for the illuminations out of an Irish MS. of the

¹ Westwood's *Miniatures*, pl. 53 and p. 153.

² *Archæologia Cantiana*, vol. iii. pl. 1.

eighth century. The Nestorians also¹ use interlaced-work in the architectural features of their churches.

The Coptic Churches of Egypt² and the Churches of Abyssinia use interlaced-work in their decoration. The only other external source, besides the East, to which it is possible to trace Celtic forms of geometrical ornament is Roman art, which in its turn was derived from the Greeks. The geometrical patterns used by the nations of classical antiquity, although very simple and effective, were few in number, and repeated with unvarying monotony. Plait-work occurs on Roman works of art, and the Greek fret (see fig. 4) is well known throughout the whole of the civilised world. In classical times mere ornament was always made subservient to the arts of painting and sculpture, whereas amongst the Celts the very opposite was the case. The ornamental portions of the designs of Celtic works have never been surpassed for ingenuity, complexity, and beauty of execution; but the figure sculpture and painting of this country, before classical influence made itself felt, is so bad as almost to be beneath criticism. Roman pavements have been suggested as the source whence the Celtic artist drew his inspiration; but there are two very strong arguments against this view—(1) that the Romans did not penetrate into Ireland, whence all Christian Celtic art originally sprung; (2) that if the Roman pavements had been studied the figure drawing would have been studied as well as the ornamental features, and the latter would have shown marks of classical influence, and therefore not have been so bad as it is.

Perhaps the feeblest suggestion as to the origin of Celtic interlaced-work is that of an antiquary, who traces it back to the basket-work and wattled dwellings of the ancient Britons,³ ignoring the fact that none of the patterns seen on the stones or in the MSS. are in the least like the ordinary system of wattle-work, and that with the exception of the plait, none of them could be reproduced in cords or wattles of any kind, as when drawn tight the shape would disappear, and the whole

¹ *Christians under the Crescent in Asia*, by the Rev. E. L. Cutts.

² *Butler's Coptic Churches of Egypt*.

³ *On the Ancient Sculptured Stones of Scotland, Ireland, and the Isle of Man*, by Gilbert G. French; *Jour. Brit. Archaeolog. Assoc.*, vol. xv. p. 63.

become a mere tangle. The Celtic interlaced-work consists, in fact, not of knots that can be tied practically, but of curved lines passing under and over each other at regular intervals.

To sum up, then, spiral-work is found in works of pagan art, and its origin is therefore within the country itself, and comes down from the Bronze Age, to which it is necessary to go back to find similar designs on the Continent within the classical area, as at Mycenæ.¹ Spiral work does not exist either in Mohammedan or Buddhist art. Key patterns and interlaced-work are possibly of Eastern origin originally, being introduced at the same time as the copies of the Gospels, but becoming subsequently so modified and developed by the natural Celtic aptitude for ornamental design as really when combined with other elements of indigenous growth, to form a new style which it is impossible to confound with any other. Celtic works of art of the Christian period consist of the illuminated pages of MSS. (chiefly copies of the Gospels and Psalters), ecclesiastical metal-work (such as shrines of bells, books, and relics, croziers, processional crosses, chalices, &c.), personal ornaments of metal (such as penannular brooches), sculptured stones (such as memorial and other crosses), and lastly, a few miscellaneous objects of ivory, bone, wood, and leather.

The chief characteristics of the Celtic style of art in Christian times are as follows: namely, first and foremost, the practice of arranging the ornament in panels, each complete in itself and separated from the next, and entirely surrounded by a marginal frame, consisting in the case of the MSS. of a series of broad and fine lines and sometimes rows of dots; in the case of metal-work, of a raised border with twisted wire or other ornamental beading inserted in the angle; and in the case of stone-work, of a round bead or cable moulding, the panel being sunk below the level of the rest of the design.² These panels are filled in either with the geometrical forms of ornament already referred to, or with figures of dragons, serpents, and other animal shapes, whose bodies, limbs, and tails are twisted in all directions, and intertwined in every

¹ Dr Hy. Schliemann's *Mycenæ*, pp. 166 to 169, 203, 301, 311, &c.

² The patterns on the crosses of the Isle of Man are not divided into panels, showing the effect of Scandinavian influence.

possible way. In later times foliaceous scroll-work is also added. On the Scottish sculptured stones, symbols and hunting scenes occur; and in the Book of Kells, figures of birds and animals, drawn unconventionally, are introduced into the ornament. On the high crosses of Ireland, and on some of the Northumbrian crosses, Scripture scenes form part of the decorative features. The colours used in the illuminations of the MSS. are yellow, red, green, blue, purple, all very bright, the yellow especially, which is perhaps the most typical colour of all. Shading is but seldom used, although examples of it occur in the Book of Kells and the Lindisfarne Gospels. The colours of the figures and drapery are put on chiefly with a view to decorative effect, and with entire disregard of the actual colours of the object represented. In the drapery of the figures of the Evangelists, &c., several different colours are used, one being separated from the other with a band of yellow, having a fine black line on each side. The general effect is that of a bright Eastern carpet or a stained glass window. The drawing of the hair is very peculiar, consisting of a large number of separate locks curled up at the end. This method of representation is also to be seen on the heads which adorn the carved capitals in early Irish architecture. The ear and nose are indicated conventionally by spiral lines. An example of the ears and eyes of animals being treated in a similar manner occurs upon the cross at St Madoes, in Perthshire. The ornamental features of the MSS. are all carefully outlined in black ink and coloured. The groundwork of the interlacements of key patterns and spirals is generally black. In the case of interlaced-work, the panel containing it is divided into blocks of different colours. Key patterns are often coloured in alternate squares like a chess-board. Each of the separate bands forming a spiral is coloured differently. The effect sought in the ornament is the same as that in the case of the figure subjects, namely, that of a mosaic of bright colours.

Of the early development of Christian Celtic art, hardly anything is known, and although more light may be thrown on the subject by careful comparison of the ornamental, palæographical, and other peculiarities of the MSS. and sculptured stones, yet it is probable its origin will always be more or less veiled in obscurity. The development

must at any rate have been very rapid, and took place between the end of the fifth century, when Christianity was introduced, and the end of the seventh century, when the Gospels of Lindisfarne¹ was produced, containing all the most elaborate forms of Celtic decoration, and indicating that the highest pitch of excellence of the style had been attained. A great many very misleading statements have been made as regards the date of Celtic works of art, the fact being that there are only a very few specimens whose age has been satisfactorily ascertained from historical data. These, however, will form landmarks to guide the student. It is possible that some of the Irish illuminated MSS. may be as early as the sixth century, but the first MS. containing Celtic forms of ornament, whose date is known without doubt, is the Lindisfarne Gospels (A.D. 698 to 721). Although written in Northumbria and illuminated by Saxons, the ornament is almost purely of Celtic origin.² The other MSS. which serve as landmarks of the style are the Gospels of Mac Regol, in the Bodleian Library at Oxford (A.D. 820), the Gospels of Mac Durnan in the Archiepiscopal Library at Lambeth, and the Gospels of Maol Brighte in the British Museum (A.D. 1138). The Stockholm Gospels is proved by entries in the volume to be earlier than A.D. 871 to 889; and the Shrine of the Book of Durrow is of date A.D. 877 to 916, so that the volume itself must be at least as old as the ninth century. From the study of the ornamental features of the above MSS., it would seem that, although there was not much change in the style of illumination between the seventh and the tenth century, yet in the latter portion of this period spiral-work was less frequently used, and the key patterns became more elaborate. Finally, in the fourteenth century, although interlaced-work was still retained in the initial letters, all the other forms of ornament had disappeared. As regards sculptured Celtic stone-work, the evidence of dated examples goes to show that the forms of ornament were developed in the MSS. first, and applied to stone-work later, but there is really no reason why

¹ Now in the British Museum.

² The Gospels of St Mulling and the Book of Diuima Mac Nathi are attributed to the seventh century on historical evidence, but not of nearly so satisfactory a nature as in the case of the Gospels of Lindisfarne, and the illuminations are very poor.

some of the sculptured stones may not be at least as old as the Lindisfarne Gospels—that is to say, of the seventh century. The chief landmarks for the study of Celtic sculptured stone-work are the tombstone of St Berechtaire of Tullylease (A.D. 839), the tombstones of Suibne (A.D. 887), and St Fiacraich (A.D. 921), at Clonmacnois, the high crosses of Clonmacnois (A.D. 914), of Monasterboice (A.D. 924), and Tuam (A.D. 1106). The styles of decoration of the Celtic stone-work in various parts of Great Britain differ far more than the styles of the MSS. There are the flat tombstones of Clonmacnois and other places in Ireland, with crosses generally inscribed, and with but little ornament, chiefly confined to the centres and ends of the limbs of the crosses. There are the high crosses of Ireland, with the most elaborate forms of geometrical ornament, such as key patterns, raised crosses of spiral-work and interlacements, together with figure subjects, and scenes from Scripture. There are the high crosses of Iona and Kildalton, in Islay, of similar design to the foregoing, and possibly of the same date, but yet with local peculiarities which mark them off as a separate group. There are the erect cross slabs of the north-east of Scotland, whose ornamentation comes nearer to that of the illuminated pages of the MSS. than that of any of the sculptured stones in other areas, and having raised bosses of spiral-work similar to the high crosses of Ireland, key patterns, interlaced-work, figure subjects, and symbols. There are the Celto-Northumbrian stones of the south of Scotland and north of England, with key patterns, interlacements, foliaceous scroll work, and figure subjects, but an entire absence of spiral designs. There are the Celto-Scandinavian crosses of the Isle of Man and west coast of Cumberland without panelling, having scaly dragons, interlaced-work, ring patterns, key patterns, figure subjects, and generally inscribed in Runes, the names mentioned being in some cases Celtic, and in others Scandinavian. There are the circular-headed crosses of Wales, with key patterns and interlacements, often having Latin inscriptions in Irish minuscules. There are the cylindrical pillar crosses of the north of England. Lastly, there are the West Highland crosses of post-Norman times, with foliaceous scroll-work, and remains of early Celtic forms which have survived in a degraded shape.

The dated specimens of Celtic metal-work are later than the MSS., the chief examples being the Shrine of the Book of Durrow (A.D. 877 to 916), the Shrine of the Book of Armagh (A.D. 937), Maelbrigde's Bell Shrine (A.D. 954), the Crozier of Kells (A.D. 967 to 1047), Shrine of St Molaise Gospels (A.D. 1001 to 1025), Shrine of the Stowe Missal (A.D. 1023 to 1764), Shrine of Columba's Psalter (A.D. 1084 to 1106), Shrine of Dimma's Book (A.D. 1120 to 1220), processional Cross of Cong (A.D. 1123), Shrine of St Lachtin's Arm (A.D. 1160), Shrine of St Patrick's Tooth (A.D. 1376). In addition to the above, mention is made of several works of metal in the Annals of the Four Masters between the years A.D. 734 and 884. Some of the most beautiful specimens of Celtic metal-work are the penannular brooches, but unfortunately the date of none of them has been ascertained. The penannular brooch found at Croy, Inverness-shire, was associated with a silver penny of Coenwulf, king of Mercia (A.D. 795 to 818).¹ The chief peculiarity introduced in the metal-work which does not occur in the stone-work, and of course could not occur in the MSS., is the practice of making incisions with facets in the triangular and other spaces left between the bands of the interlaced-work or between the spirals.² This kind of incised ornament is to be seen in Norman architecture occasionally, the hollow produced being the shape of an inverted pyramid. Of the three kinds of geometrical decoration on metal-work interlacements occur most frequently, spirals occasionally, as on the back of the Tara brooch, and key patterns very rarely.

Besides the MSS., the sculptured stones, and the metal-work, a few miscellaneous objects of ivory, bone, wood, and leather, with Celtic forms of ornament upon them, are to be found in Museums.

KEY PATTERNS.

Key patterns are so called from their resemblance to the alternations of black and white which are to be seen on that part of a key which is

¹ *Scotland in Early Christian Times*, 2nd series, p. 24.

² See *Catalogue of the Royal Irish Academy*, p. 575; and penannular brooch in the Bergen Museum, figured in *Scotland in Early Christian Times*, 2nd series, p. 31.

cut away in L-shaped holes to allow them to pass the wards of the lock.¹

Key patterns are entirely composed of straight lines, so arranged as entirely to cover the space to be ornamented, being drawn in black upon a white ground. Between each black line is a white line, separating it from the one next to it; and if the black and white were reversed, a fresh key pattern would be obtained.

A key pattern may therefore be defined as one so drawn that the pattern itself consists of straight black lines on a white ground, and the ground consists of straight white lines on a black ground, one being the converse or reciprocal of the other. One set of lines is always continuous, and can be drawn without removing the pen from the paper; whereas the other set, which form the ground, is discontinuous or broken. The labyrinths of the Middle Ages were arranged on the same principle as the lines of a key pattern, the paths being the continuous lines, and the hedges or walls which separated them being the discontinuous ones.²

In Celtic key patterns the space to be ornamented is entirely covered with black lines on a white ground, except when the lines intersect at an angle of 45° , and in this case small triangular spaces are left, which are filled in with black. These little black triangles (see fig. 42) give a peculiar appearance to Celtic key patterns, which no others possess. From the definition which has been given of a key pattern, it follows that there are primarily two distinct kinds, namely, (1) key patterns composed of lines branching out at angles of 90° , 60° , or 45° , from a stem line (see fig. 1); patterns of this class are introduced partially into Celtic ornament (see figs 19, 35, 51, and 52, where the lines first bend round spirally, and then branch out afterwards); and (2) key patterns composed of spirals drawn with straight lines bending round at angles of 90° , 60° , or 45° , so that for each key pattern formed of straight lines, there is a corresponding spiral pattern formed of curved lines (for instance, the key pattern, fig. 14, is identical with the spiral pattern, fig. 81).

¹ In Cædmon's *Metrical Paraphrase of the Scriptures*, a MS. of the tenth century, in the Bodleian Library at Oxford, a key conventionalised so as exactly to resemble an ornamental pattern is to be seen.—*Archæologia*, vol. xxiv. pl. 58.

² See *Jour. Brit. Archæolog. Inst.*, vol. xiv. p. 216; *Assoc. Architect. Soc. Reports*, vol. iv. p. 151; Didron's *Annales Archéologiques*, vol. xvii. p. 119.

All geometrical ornament is based ultimately on the fact that there are only three kinds of regular plane figures with which a flat surface can be completely covered, the figures being placed so that they will fit in any position with their corners meeting at a point, and their sides touching. The figures referred to are the square, the equilateral triangle, and the hexagon. All geometrical ornament is therefore founded on lines drawn at equal distances apart, and intersecting at angles of 90° or 60° ,¹ on the square system, on the equilateral triangle system (the latter including hexagons which are made up of six equilateral triangles). The system founded on squares is the only one which is used in Celtic ornament. Every designer begins by drawing guiding lines, such as those just described; he then fills in each square with special forms of ornament, and finally makes the whole into one design by a series of connecting lines. There are thus three things to be considered in composing an ornamental design—(1) the method of subdividing the space with guiding lines, (2) the method of filling in the lines thus obtained, (3) the method of connecting the figures together, so as to form a complete pattern.

Referring to the diagrams, Plate 1 shows the method of subdividing the space to be ornamented with guiding lines founded on the square system, which may be done in the following different ways:—(A) squares set parallel; (B) squares set diagonally; (C) squares set diagonally, and every alternate vertical row subdivided into two triangles; (D) squares set diagonally, and subdivided into two triangles; (E) squares set parallel and subdivided into four triangles; (F) squares set parallel, and subdivided into eight triangles.

Plate 2 shows the method of filling in squares with key patterns as follows:—(a) single straight line spiral; (b) double straight line spiral (discontinuous); (c) double straight line spiral (continuous);² (d) and (e) patterns used as the centres from which double straight line spirals spring;

¹ Pentagons are largely used in Mohammedan art, but they are placed so that their centres lie in lines intersecting at right angles, and the ornament is thus founded on squares, and not on pentagons.

² It will be noticed that (b) and (c) are reciprocal patterns; that is to say, that one is changed into the other by reversing the colours, and making black white.

(f) quadruple straight line spiral, or swastica with two arms, or one bend at right angles; (g) and (h) quadruple straight line spirals, with three arms, or two bends at right angles; (i), (k), (m), and (n) quadruple straight line spirals with four arms, or three bends at right angles; (l) and (o) to (u) quadruple straight line spirals with five arms, or four bends at right angles.

Note.—Some of the above variations are produced by bending one arm in the opposite direction to the one which preceded it, or, in other

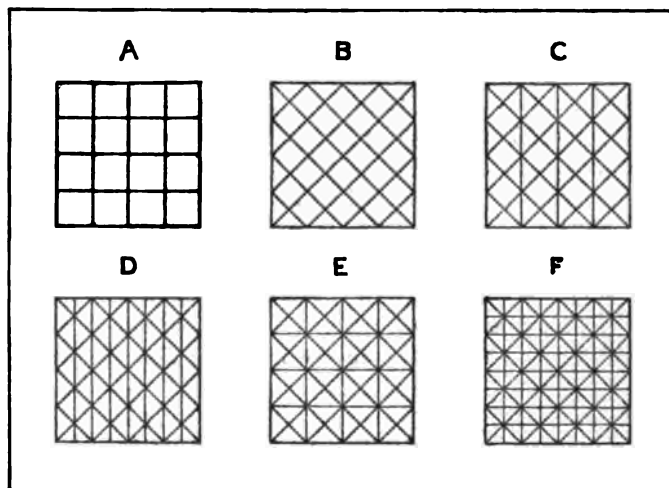


Plate 1. Showing sub-division of Space and Direction of Lines.

words, by reversing the direction of the spiral. The variations given are all that are possible, with from one to five straight lines arranged spirally or swastica-wise. Several of them, such as (f), (g), (h), and (l), occur in Celtic art. Some again are found only in classical ornament, and others only in Eastern art. It is evident that designers have never worked out the theory of geometrical ornament mathematically, and tried to find all the possible variations to be derived from one element, such as the swastica, but have either copied what went before, or have drawn

their lines in the direction suggested by the fancy of the draughtsman at the moment.

All the patterns shown on Plate 2, can be right or left handed, which of course doubles their number when used in combination. The number of variations of the quadruple straight line spirals shown on Plate 2, figs. (f) to (u), is limited by the mathematical theory of permutations

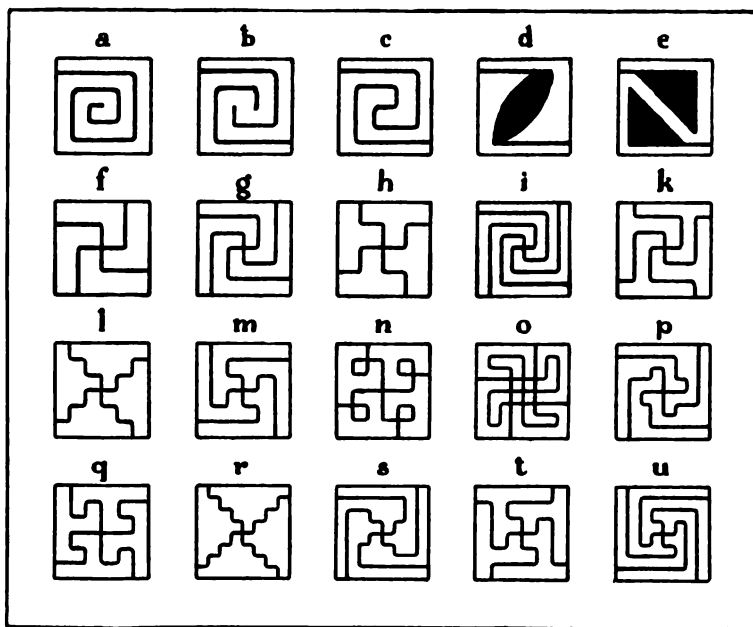


Plate 2. Methods of filling in Squares.

and combinations, and they are obtained thus :—Starting with a simple cross, by adding a second arm, a right or left handed swastica is obtained according to the direction given to the second arm ; from each swastica two three-armed straight line spirals are obtainable on the same principle and from each two, four with four arms, and from each four, eight with five arms, and so on, multiplying by two each time. Some of the

patterns which can be arrived at by working at the subject mathematically are quite unknown, and it says much for the fertility of the imagination of the Celtic artist that so many should have been already discovered. The modern designer seems to be content with mere copying, and is quite incapable of inventing anything new or developing what has gone before, although there is an enormous field open before him. As a single instance, key patterns and spirals of the Celtic type have not as yet

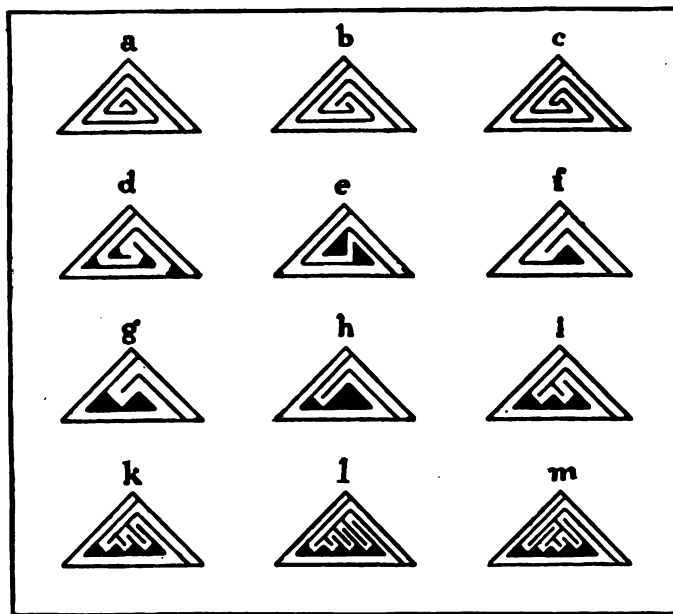


Plate 3. Methods of filling in Triangles.

been applied at all to a surface divided up into hexagons or equilateral triangles.

Plate 3 shows the various methods of filling in half squares or triangles with key patterns, as follows :—(a) single straight line spiral ; (b) double straight line spiral (discontinuous) ; (c) double straight line spiral (continuous) ; (d) to (h) methods of filling up spaces left between lines

of straight line spirals; (i) to (m) double straight line spirals, one of the lines of which has branches at right angles, the triangular spaces being filled in with black.

Note.—The special character of Celtic key patterns as distinguished from others, is due partly to the lines on which the pattern is based running diagonally, but more especially to the method of filling in the little triangular spaces left between the lines with black. Chinese key patterns are often founded on lines running diagonally, but the filling in of the small triangles with black is peculiarly Celtic.

Plate 4 shows the various methods of connecting together squares filled in with straight line spirals. The method of connection is the same whether the squares are set parallel (A, Plate 1) or set diagonally (B, Plate 1). There are two distinct methods of connection employed—(1) where the straight line spirals are connected to each other (Plate 4, figs. I. to IV.), and (2) where the straight line spirals are connected to a central stem in the form of a zig-zag line (Plate 4, figs V. and VI.). For every method of connecting straight line spirals, there is a corresponding method of connecting spirals composed of curved lines (see figs. 72 to 77).


Fig. I. shows the method of connecting squares filled in with double straight line spirals, and is founded on the principle that a surface may be entirely covered with H-shaped figures, placed in horizontal rows, all facing the same way, but with the sides of the Hs in one row opposite the centres of the Hs in the next row. The Hs correspond in curved spiral work to two C-shaped curves placed back to back, . Here all the squares filled in with straight line spirals are connected together, so as to form a continuous net-work of lines covering the whole surface.

Fig. II. shows the method of connecting squares filled in with quadruple straight line spirals, and is founded on the principle that a surface may be entirely covered with H-shaped figures placed in horizontal rows, facing alternately upwards and sideways. This method of connection corresponds in curved spiral-work to the one shown on fig. 72. Here all the squares filled in with straight line spirals are connected together so as to form a continuous net-work of lines covering the whole surface.

Fig. III. shows the method of connecting squares filled in with double straight line spirals, and is founded on the principle that a surface may

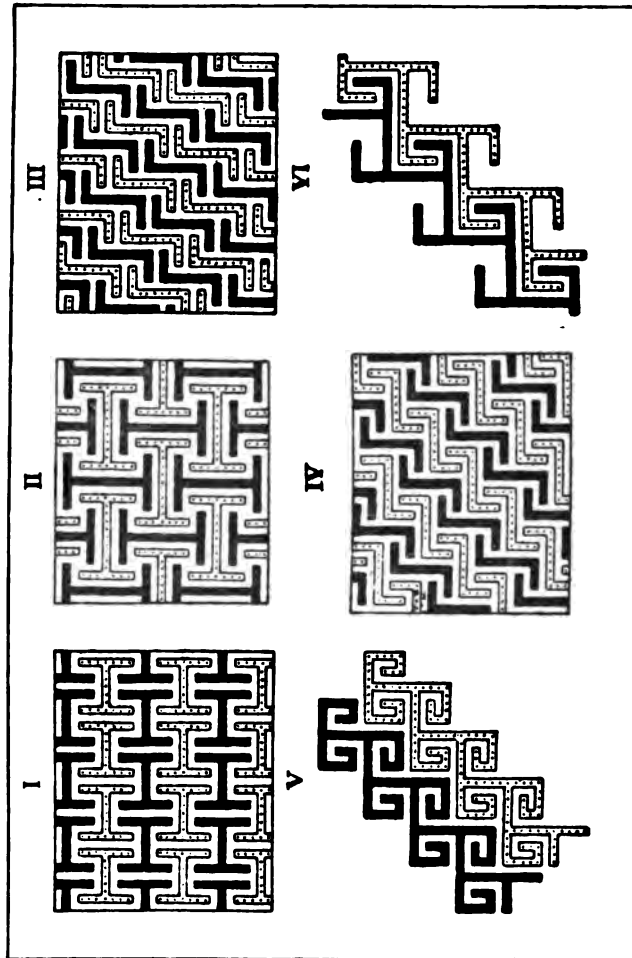


Plate 4. Methods of connecting squares filled in with straight line spirals.

be entirely covered with Z-shaped figures in rows all facing the same way. The Z-shaped figures correspond to S-shaped curves in spiral-

work (see fig. 73). Here the squares filled in with straight line spirals are not at all connected together so as to form a continuous net-work of lines covering the whole surface, but each diagonal row of Zs forms a continuous line.

Fig. IV. is the same as the preceding, except that every other row of Zs faces sideways.

Fig. V. shows the method of connecting squares filled in with single straight line spirals. A zig-zag line is drawn, following two sides of one square and the two opposite sides of the next, thus forming a stem line from which the spirals branch out right and left. The spirals do not form a continuous net-work of lines covering the whole surface, but each stem with the spiral branching from it is continuous. This method corresponds in curved spiral-work to the one shown on fig. 81.

Fig. IV. is the same as the preceding, except that the straight line spirals are double instead of single, and corresponds in curved spiral-work to that shown on fig. 82.

Plate 5 shows the various methods of connecting squares and triangles filled in with straight line spirals.

Figs. VII. to X. show the methods of connecting squares set diagonally and triangles (fig. C, Plate 1), filled in with straight line spirals.

Figs. XI. and XII. show the methods of connecting triangles (fig. D, Plate 1), filled in with straight line spirals.

Note.—The connecting lines are all those in the pattern which do not form part of the straight line spirals, and when the number of turns of the spiral are reduced to nothing, a series of similar figures is obtained entirely covering a surface as shown on (figs. I. to IV. Plate 4). On Plate 5 the spaces between the connecting lines are left blank for the straight line spirals to be filled in; whereas on Plate 4, the numbers of turns of the straight line spirals are reduced to nothing, and the connecting lines all brought up close together.

Figs. 1 to 10 show the various forms of border key patterns, founded on squares set parallel (Plate 1, fig. A), and produced by filling in the squares with single and double straight line spirals (Plate 2, figs. a, b, and c). Other border patterns can be obtained by filling in the squares with quadruple straight line spirals or swastikas. One of these is given

in (fig. 59), where it is classed with the other swastica patterns. Border key patterns founded on squares set parallel, such as those shown on figs. 1 to 10, occur most frequently in classical art, and are commonly known as Greek frets. They are to be found occasionally in Celtic art, the largest number of examples being on the cross slabs of the eighth and ninth centuries at Clonmacnois in Ireland. The method of covering whole surfaces with key patterns founded on squares set parallel, is

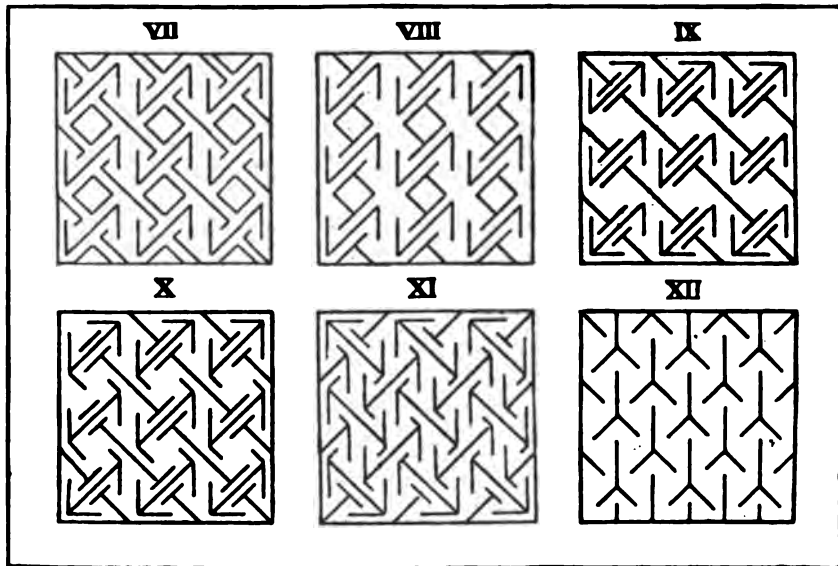
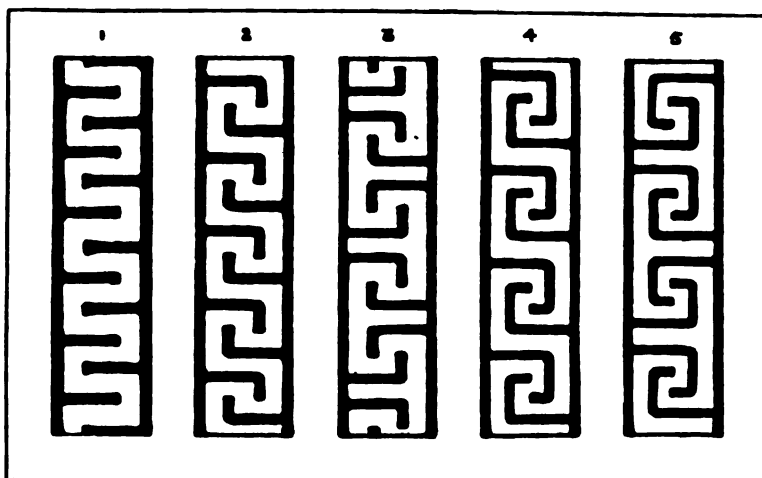


Plate 5. Methods of connecting Squares and Triangles filled in with Straight-line Spirals.

the same as when the squares are set diagonally (see figs. 11 and 14), as hereafter explained. This class of key pattern looks far better when the squares are placed diagonally, which is almost always the case, except in a few instances, when the two kinds of ornament are used to contrast one with the other, as on the Rosemarkie Cross, Inverness-shire, where the design on two of the panels round a cross consist of square key patterns set diagonally, whilst on the other two panels they are set parallel.

Fig. 1 is the simplest kind of border key pattern founded on the system of squares set parallel (fig. A, Plate 1), and it is probable that the more complicated forms were developed from it. It is produced by drawing straight strokes facing each other alternately to the right and left, at right angles to the two parallel lines at each side of the border.

Figs. 2 and 4 are founded on squares set parallel (fig. A, plate 1), and filled in with double straight line spirals (fig. b, Plate 2), all the spirals having the same direction of twist, and can be developed from fig. 1 by



Figs. 1 to 5. Single Border Patterns formed by filling in Squares set parallel (A).

adding fresh strokes at right angles. The lines which connect the spirals form the sides of the border.

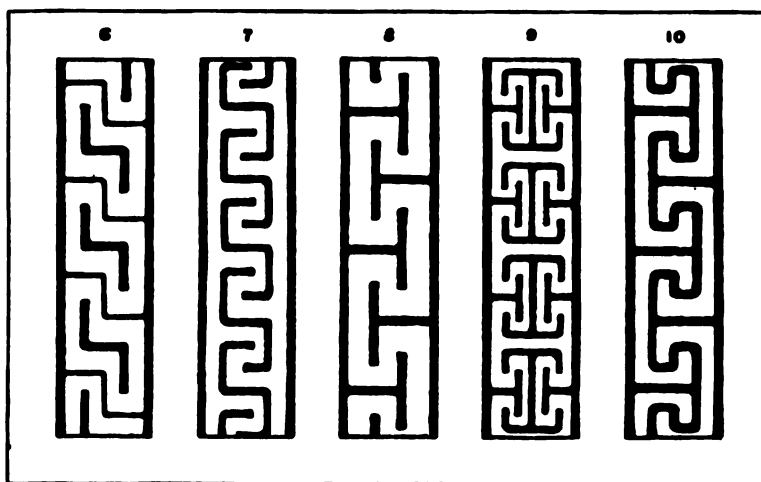
Figs. 3 to 5 are the same as the preceding, except that the spirals are alternately right and left handed, instead of all having one direction of twist.

Figs. 6 and 7 are founded on squares set parallel (fig. A, Plate 1), and filled in with double straight line spirals (b, Plate 2), all having the same direction of twist, and connected to each other, instead of to the lines forming the border.

Fig. 8 is the same as the preceding, except that the spirals twist alternately in opposite directions instead of all being the same, and are connected to the lines forming the border as well as to each other.

Fig. 9 is a double border pattern similar to the preceding, but the spirals connected by H and T-shaped lines according to method (fig. I. Plate 4).

Fig. 10 is the same as fig. 8, except that the spirals are continuous (fig. a, Plate 2), instead of broken (fig. b, Plate 2).



Figs. 6 to 10. Single Border Patterns formed by filling in Squares set parallel (A).

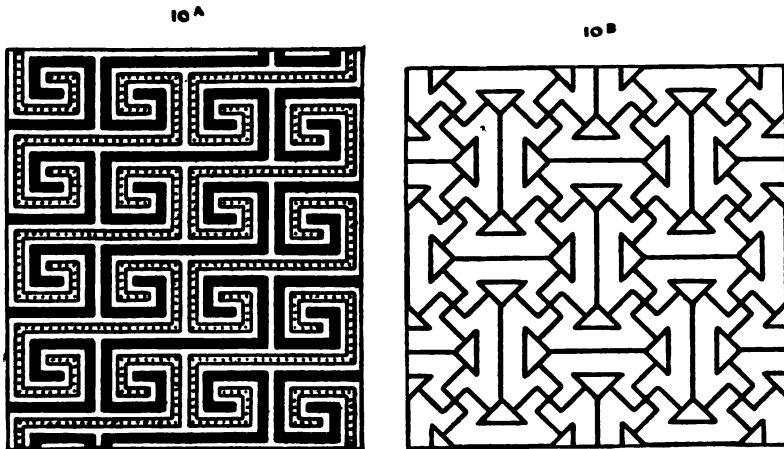
Fig. 10A is a surface key pattern founded on squares set parallel (fig. A, Plate 1), and filled in with double straight line spirals (fig. b, Plate 2), the method of connection being that on (fig. III. Plate 4).

Fig. 10B is a surface key pattern founded on squares set parallel (fig. A, Plate 1), and filled in with swastikas placed diagonally.

Figs. 11 to 15 show the various forms of surface key patterns founded on squares set diagonally (fig. B, Plate 1), and filled in with single or double straight line spirals (figs. a to e, Plate 2), the methods of connection being shown on Plate 4. The simplest method of connection

is that shown on (fig. V. Plate 4), and used in forming the key pattern on fig. 14, which is taken from the cross page at the commencement of St John's Gospel in the Book of Lindisfarne,¹ and is therefore as old as the eighth century. This is the surface key pattern which occurs with greater frequency than any other upon the Scottish sculptured stones, there being at least twenty-four examples. It is used by the Celtic artist as a background to cover a large surface, much in the same way that the Chinese use their favourite key pattern (fig. 15 B).

Fig. 15A, which shows one of the arms of the cross at Dunfallandy,



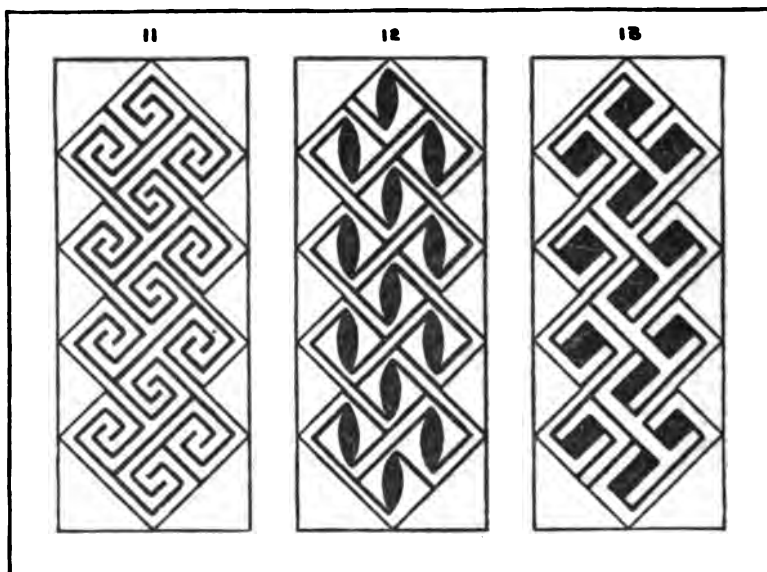
Figs. 10A, 10B. Patterns formed by filling in Squares set parallel (A).

in Perthshire, may be compared with fig. 15B, which is from a Chinese book of ornamental designs. In both cases the object sought is to produce a pleasing contrast between the stiff lines of the key pattern and the gracefully flowing lines of the raised bosses of spiral-work on the sculptural stones, or the unconventional portions of the Chinese design. The curved lines are concentrated on a small space, generally circular in shape, whilst the key pattern forms the background.

¹ *Palaeographical Soc. Publications*, pl. 5.

Squares set diagonally (fig. B, Plate 1), and filled in with either double or quadruple spirals (figs. b and f, Plate 2), are very seldom used, but the method of forming the connections is shown on (figs. I. to IV. and VI., Plate 4).

The triangles left at the sides of all the patterns belonging to this group, in consequence of the squares being set diagonally, are in the



Figs. 11 to 13. Patterns formed by filling in Squares set diagonally (B).

MSS. generally filled in with a plain wash of colour, and on the stones with some of the triangular key patterns shown on Plate 3.

Fig. 11 is founded on squares set parallel (Plate 1, fig. B), and filled in with double straight line spirals (Plate 2, fig. b), the connecting lines being H-shaped (fig. I. Plate 4).

Fig. 12 is the same as the preceding, but the squares filled in with pattern (d, Plate 2), and connected with a zig-zag line (fig. VI. Plate 4).

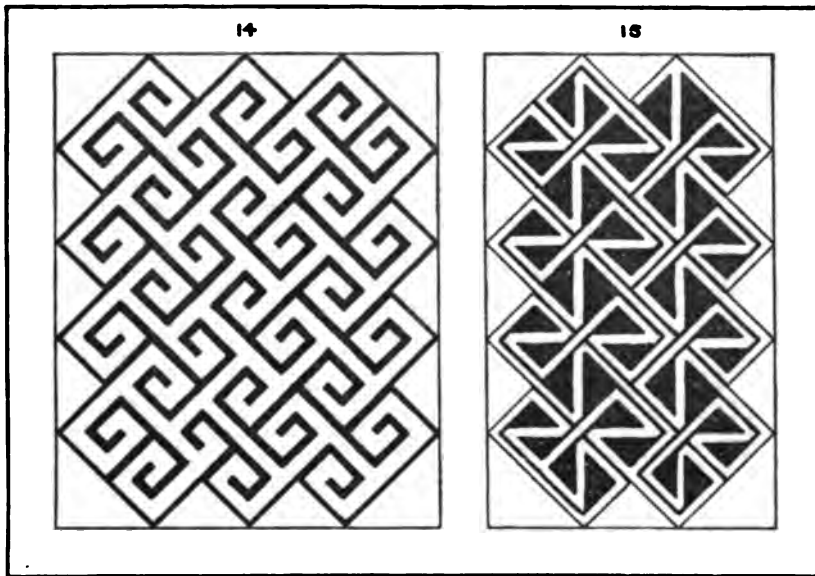
Fig. 13 gives another method of filling in the squares similar to the

preceding, except that the zig-zag connecting line (fig. VI. Plate 4) starts from the bottom instead of from the sides.

Fig. 14 is founded upon squares set diagonally (Plate 1, fig. B), and filled in with single straight line spirals (Plate 2, fig. a), the connecting line being zig-zag (fig. V. Plate 4).

Fig. 15 is the same as the preceding, except that the squares are filled in with pattern (c, Plate 2).

Fig. 15A is founded on squares set parallel (fig. A, Plate 1), and



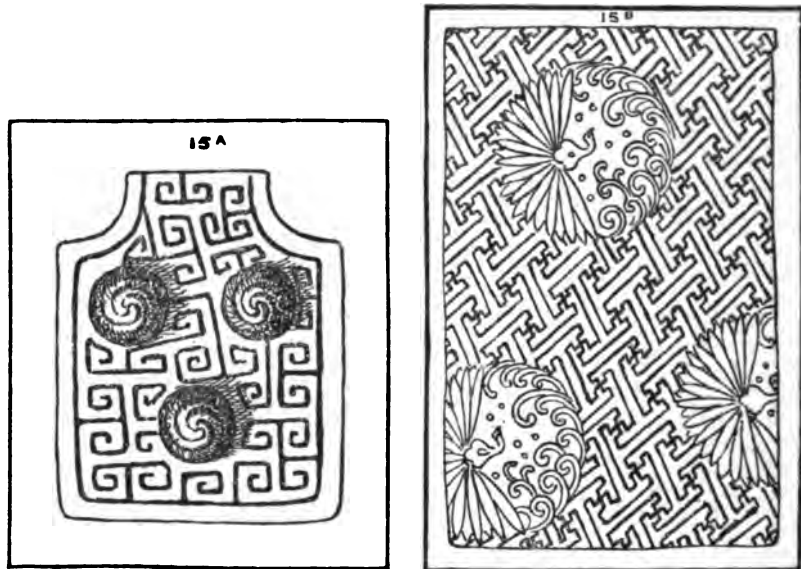
Figs. 14, 15. Patterns formed by filling in Squares set diagonally (B).

filled in with single straight line spirals (fig a, Plate 2). The method of connection is irregular by means of a zig-zag line (fig. V. Plate 4). The key pattern serves as a background to contrast with the raised bosses of spiral-work. The drawing represents the left arm of the cross at Dunfallandy, in Perthshire.

Fig. 15B is founded on squares set diagonally, and filled in with

quadruple straight line spirals (fig. m, Plate 2), the connection being H-shaped (fig. II. Plate 4). The key pattern serves as a background to contrast with the more unconventional portions of the design. The drawing is taken from a book of Chinese ornaments.

Figs. 16 to 29 show border patterns founded upon squares set diagonally, every alternate row being subdivided into two triangles (Plate 1, fig. C), and the squares filled in either with the patterns given



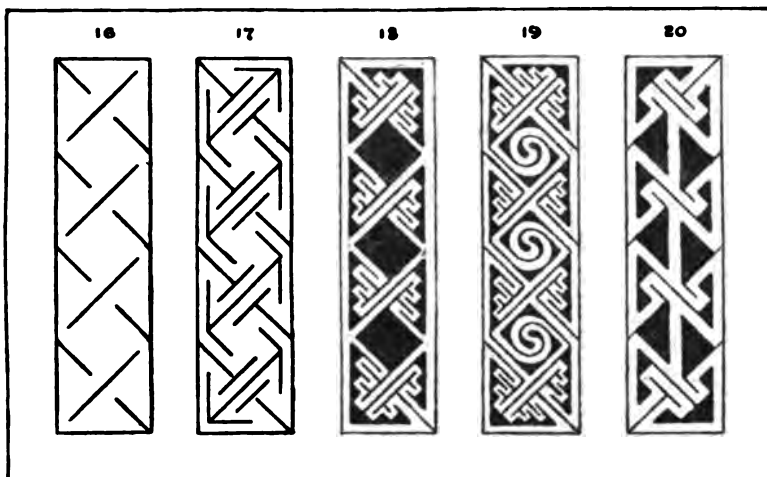
Figs. 15A, 15B. Celtic and Chinese methods of Ornamentation. Left Arm of Celtic Cross at Dunfallandy and Chinese Pattern.

on Plate 2, or with curved spirals, or with plain washes of colour, and the triangles with the patterns given on Plate 2. The connecting lines are Z-shaped (figs. VII to XI. Plate 5).

Figs. 16 and 17 give the method of drawing the setting out lines for patterns on figs. 19, 23, and 25, and those for the others may be drawn in a very similar manner.

Fig. 18 is founded on squares set diagonally and triangles (Plate 1, fig. C), the squares being filled in with a plain wash of colour, and the triangles with double straight line spiral with branches (Plate 3, fig. k), the method of connection being that shown on (fig. VIII. Plate 5).

Fig. 19 is the same as the preceding, except that the squares are filled in with double curved spirals, and the connecting lines are those shown on (fig. X. Plate 5), but with two arms of the Hs left out, so that the squares can be filled in with double instead of quadruple spirals.¹



Figs. 16 to 20. Patterns formed by filling in Squares diagonally and Triangles (C).

Fig. 20 has the squares filled in with pattern (e, Plate 2), and the triangles with (g, Plate 3), the connecting lines being those shown on (fig. VII. Plate 5).

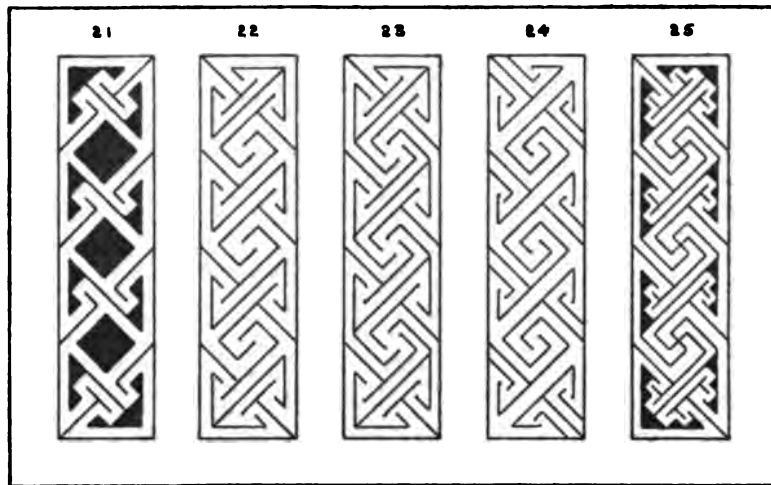
Fig. 21 has the squares filled in with a plain wash of colour, and the

¹ In a similar manner, fig. IX. Plate 5, is derived from fig. X. Plate 5, by leaving out two of the arms of the Zs, so that the squares can be filled in with double instead of quadruple spirals.

triangles with (fig. g, Plate 3), the connecting lines being those shown on (fig. VII. Plate 5).

Fig. 22 has the squares filled in with (fig. b, Plate 2), and the triangles with (fig. b, Plate 3), the connecting lines being those shown on (fig. IX. Plate 5).

Fig. 23 has the squares filled in with a quadruple straight lined spiral, and the triangles with (fig. b, Plate 3), the connecting lines being those shown on (fig. X. Plate 5).



Figs. 21 to 25. Patterns formed by filling in Squares set diagonally and Triangles (C).

Fig. 24 has the squares filled in with (fig. b, Plate 2), and the triangles with (b, Plate 3), the connecting lines being the same as those used for fig. 19, the pattern being black on a white ground, instead of white on a black ground.

Fig. 25 has the squares filled in with (fig. g, Plate 2), and the triangles with (fig. i. Plate 3), and the connecting lines are those shown on (fig. X. Plate 5).

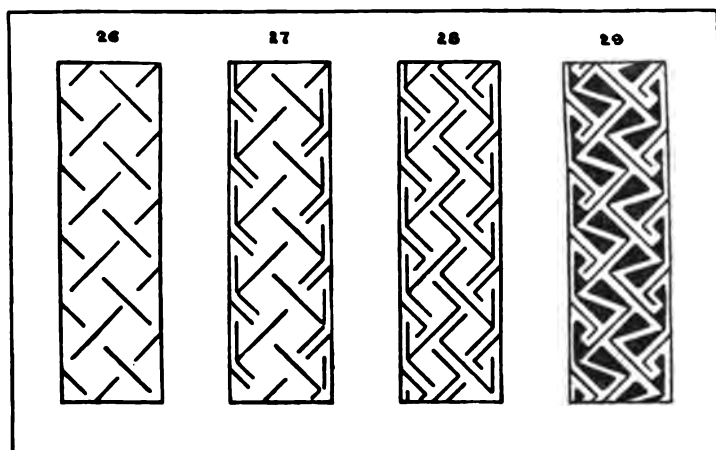
Figs. 26 to 28 give the setting out lines for drawing fig. 29.

Fig. 29 has the squares filled in with (fig. e, Plate 2), and the triangles with (fig. g, Plate 3),¹ the connecting lines being shown on fig. 28.

Figs. 30 to 35 show single border key patterns, founded on squares set diagonally, and divided into two triangles (Plate 1, fig. D), the connecting lines being those shown on (fig. XI. Plate 5).

Figs. 30 and 31 give the setting out lines for drawing figs. 32 to 35.

Fig. 32 has the triangles filled in with (fig. b, Plate 3).



Figs. 26 to 29. Patterns formed by filling in Squares set diagonally and Triangles.

Fig. 33 has the triangles filled in with (fig. d, Plate 3).

Fig. 34 has the triangles filled in with (fig. i, Plate 3).

Fig. 35 has the triangles filled in with (fig. m, Plate 3).

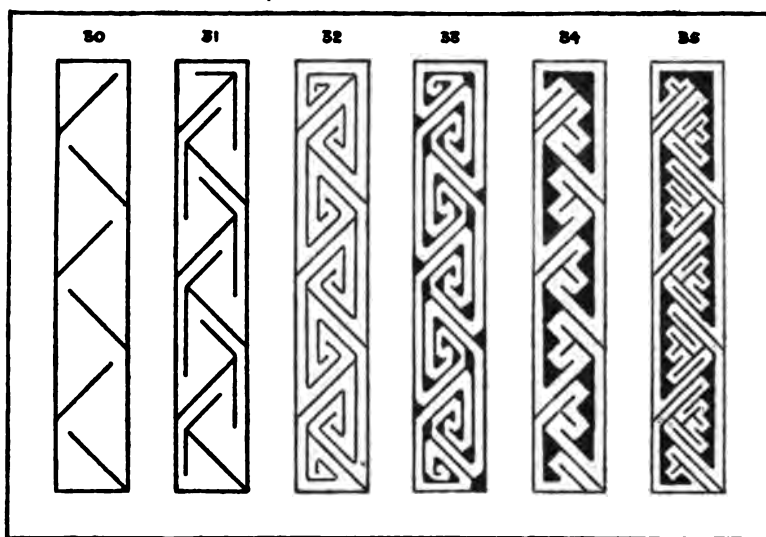
Figs. 36 to 39 show double border key patterns founded upon squares

¹ This pattern is a very peculiar one, and only occurs, as far as I know, upon the cross at Rosemarkie, in Inverness-shire. It was first pointed out to me by Dr Anderson, who sent me a photograph of the stone (taken by Mr D. White of Inverness), without which I should have been unable to have produced a drawing of it, as the plate given in Stuart's *Sculptured Stones* is so inaccurate as to be quite useless for purposes of study.

set diagonally, and divided into two triangles, the connecting lines being Z-shaped (fig. XI. Plate 5), and are drawn on the principle that a surface can be covered with Z-shaped lines as shown on fig. 41, or rather H-shaped lines with two of the lines of the H bent at an angle of 45° . It has already been pointed out how a surface may be covered with H-shaped lines. (Plate 4, figs. I. and II.)

Figs. 36 and 37 give the setting out lines for drawing figs. 38 and 39.

Fig. 38 has the triangles filled in with (fig. h, Plate 3).



Figs. 30 to 35. Patterns formed by filling in Triangles (D) or Half Squares.

Fig. 39 has the triangles filled in with (fig. i, Plate 3).

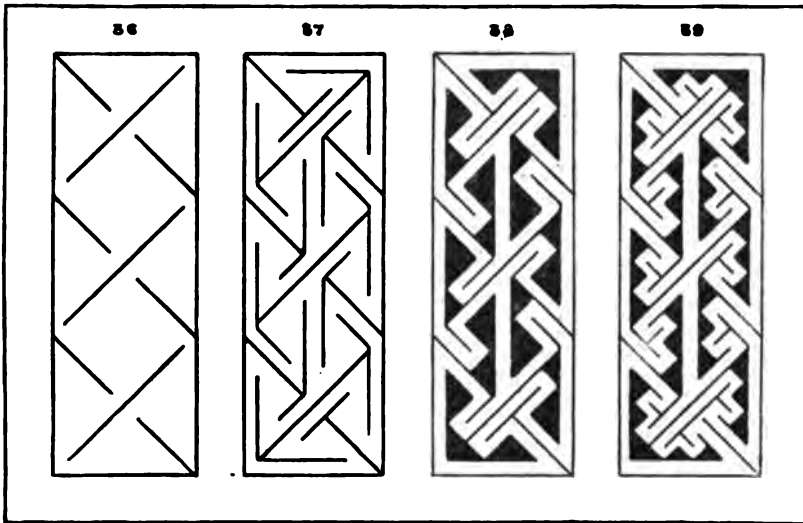
Figs. 40 to 43 show surface patterns founded upon squares set diagonally, and divided into two triangles, the connecting lines being Z-shaped (fig. XI. Plate 5).

Figs. 40 and 41 show the setting out lines for drawing figs. 42 and 43.

Fig. 42 has the triangles filled in with (fig. i, Plate 3). This is perhaps the most characteristically Celtic pattern of all those described. Although not very common upon the sculptured stones, there being

only seven examples in Scotland, one or two in Ireland, and hardly any in England and Wales, it is yet of frequent occurrence in the MSS. It will be found in the Lindisfarne Gospels, the Book of Kells, St Chad's Gospels, and is very largely employed in the Gospels of Mac Durnan.

Perhaps the best example upon sculptured stone-work is on the cross at Rosemarkie, in Inverness. The effect of the little black triangles, which appear on the pattern as drawn in the MSS., is produced in stone-work by deep incisions of the same shape. When the Rosemarkie cross



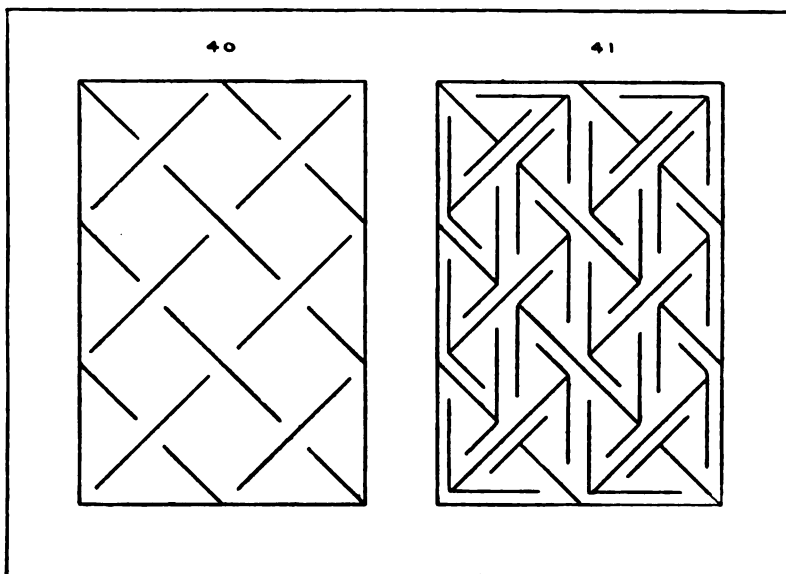
Figs. 36 to 39. Patterns formed by filling in Squares divided into two Triangles (D).

was first carved it must have looked exactly like a page out of one of the best Celtic MSS., but the ravages of the weather have caused the triangular incisions to lose their shape and look like honey-combing. The pattern is a difficult one either to draw or carve, and its occurrence in its most finished form, as at Rosemarkie, indicates that the sculpture is the work of a master-hand. Although but a small fragment, the stone from Gattonside, near Melrose, and now in the National Museum, is a well-executed example of this particular form of ornament, as is also

a small slab on the island of Inchcolm. Professor Westwood calls it the Z or Chinese pattern.¹

Fig. 43 is the same as the preceding, but with the triangles filled in with (fig. e, Plate 3).

Figs. 44 to 47 show double border key patterns founded upon squares set diagonally, and divided into two triangles. The method of drawing



Figs. 40, 41. Patterns formed by filling in Squares divided into two Triangles (D).
(Setting out lines for Nos. 42, 43.)

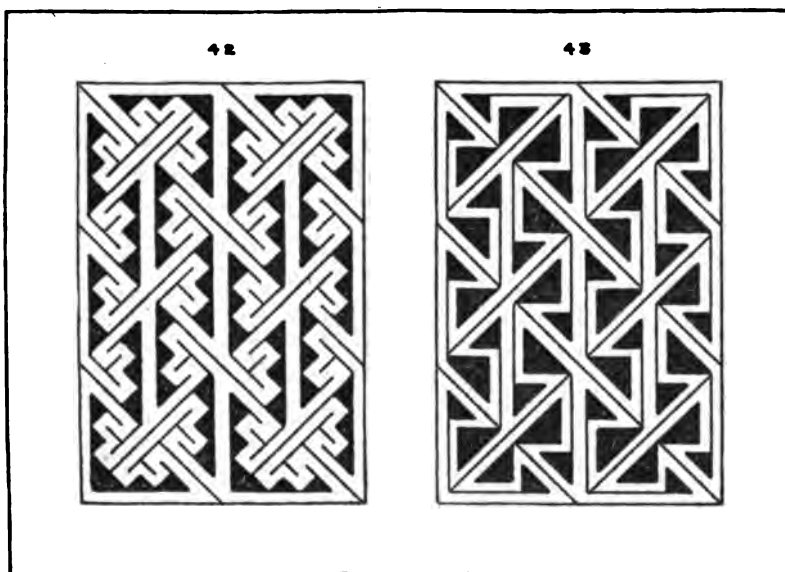
the connecting lines is founded on the fact that a surface may be covered with star-shaped figures formed of three equal lines radiating from a point (fig. XII. Plate 5). In order that the pattern might be perfectly symmetrical, these three lines should make angles of 120° with each other, instead of one being 90° and the other two 135° , as is the case on figs. 44 to 47. These patterns should, in fact, be classed amongst those

¹ *Jour. Brit. Archaeolog. Inst.*, vol. vii. p. 17, and vol. x. p. 275.

founded on the equilateral triangle, and not on the square system. They are not at all common, and are to found chiefly in the Book of Kells, and on stones in South Wales. There is a very fine example on one of the crosses at Llantwit Major, in Glamorganshire.¹

Figs. 44 and 45 give the setting out lines for drawing figs. 46 and 47.

Fig. 46 has triangles filled in with (fig. g, Plate 3).



Figs. 42, 43. Patterns formed by filling in Squares divided into two Triangles (D).

Fig. 47 has the triangles filled in a way which is quite peculiar, and only occurs in the Book of Kells.

Figs. 48 to 52 show the methods of producing surface key patterns founded upon squares set parallel and divided into four triangles, the connecting lines being drawn on the principle before explained, that H-shaped figures can be arranged so as to entirely cover a surface (fig. I, Plate 4). These patterns are generally used only to fill in a single

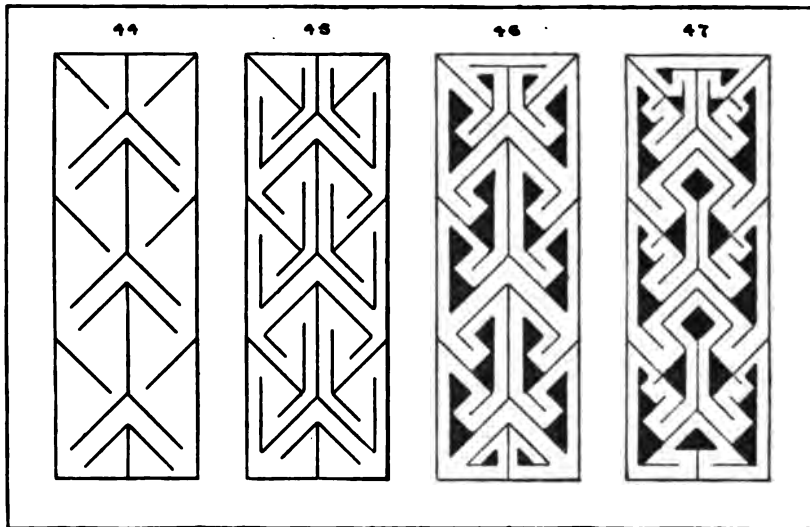
¹ Westwood's *Lapidarium Walliae*, pls. v. and vi., and p. 11.

square, and not as a surface ornament. Exceptions to this rule, however, occur on the cross at Keils in Knapdale,¹ and in the initial page of the Gospel of St Matthew in the Gospels of Mac Durnan.

Fig. 48 gives the method of covering a surface with this class of key pattern, the triangles being filled in with (fig. i, Plate 3).

Fig. 49 has two of the triangles filled in with (fig. f, Plate 3), and the other two with (fig. g, Plate 3).

Fig. 50 has the triangles filled in with (fig. i, Plate 3).



Figs. 44 to 47. Patterns formed by filling in Squares divided into two Triangles (D).

Fig. 51 has the triangles filled in with (fig. k, Plate 3).

Fig. 52 has the triangles filled in with (fig. 1, Plate 3).

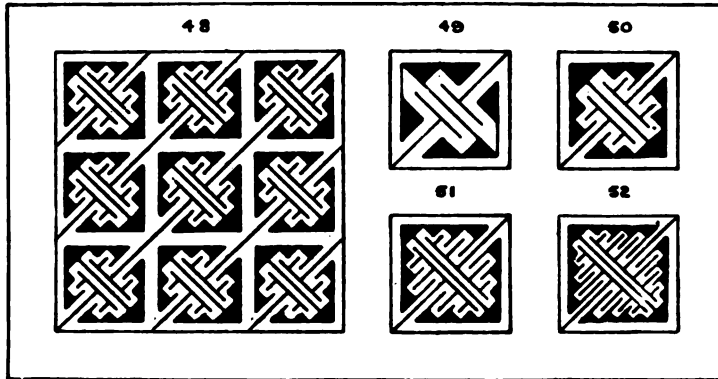
Figs. 53 to 58 show the methods of producing surface ornament founded on squares set parallel and divided into eight triangles (fig. F, Plate 1). These patterns are hardly ever used for covering a surface, but are confined to a single square. The connecting lines are in the shape of a cross.

¹ Stuart's *Sculptured Stones*, vol. ii. pl. xxxii.

Fig. 53 has the connecting line in the shape of a cross placed parallel, and the triangles filled in with (fig. b, Plate 3).

Fig. 54 is the same as the preceding, except that the filling in of the triangles is done in a way peculiar to this particular pattern, which only occurs in the Gospels of Mac Durnan.

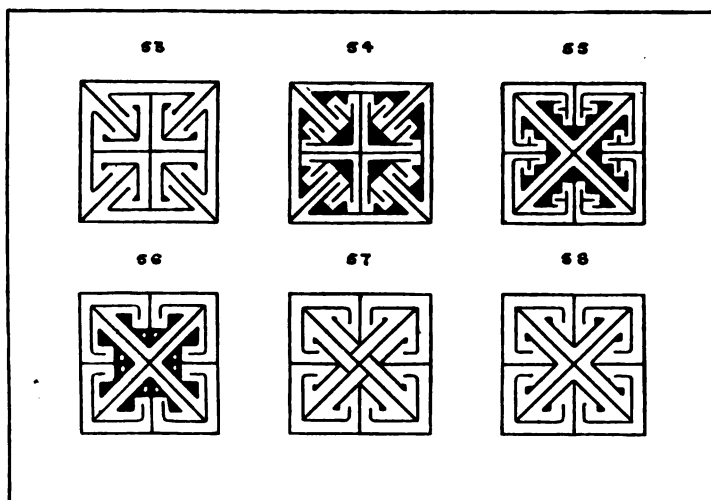
Figs. 55 to 58 have the connecting cross placed diagonally, and the triangles filled in with (fig. g, plate 3) in the case of fig. 56, and with (fig. b, Plate 3) in the case of figs. 57 and 58. The variation on fig. 58, produced by continuing on four of the lines, will be noticed in fig. 57.



Figs. 48 to 52. Patterns formed by filling in Squares divided into four Triangles (E).

Figs. 59 to 65 show key patterns where the quadruple straight line spiral or swastica is used for filling in. They are of more common occurrence in classical and Eastern art than in Celtic art. The swastica being a Buddhist symbol, will account for its so often being used in Chinese ornamental designs, and it appears as one of the forms of the Cross in Christian times. The connection which exists between symbolism and ornament opens up a most interesting field of inquiry, but of too vast an extent to be entered upon here. It is often very difficult to determine where symbolism ends and ornament begins; and also to find whether a mere ornament has in time become a symbol, or

whether what was first symbol has degenerated subsequently into an ornament. The swastica has been used as a symbol from pre-historic times down to the present day; and although a great deal has been written upon the subject, very little seems to be known either as to its origin or meaning. The most reasonable theory is that which connects it with rotary motion (which its arms suggest), either of the sun or of the primitive machine for producing fire by the friction of a swiftly revolving piece of wood.



Figs. 53 to 58. Patterns formed by filling in Squares divided into eight Triangles (F).

The swastika occurs within the classical area on coins,¹ on spindle whorls from Troy,² on pottery,³ in India, on the feet of Buddha,⁴ in China, on objects of all kinds; in Scandinavia upon golden bracteates,⁵ and on Roman altars found in this country.⁶

¹ *Numismatic Chronicle*, vol. xx. p. 18.

² Dr Schliemann's *Troy and its Remains*.

³ J. B. Waring's *Ceramic Art*.

⁴ *The Reliquary*, vol. xxii. plate i.

⁵ Prof. Stephen's *Runic Monuments*, vol. ii. p. 524.

⁶ Dr Bruce's *Roman Wall*.

As a Christian emblem it is to be found in the Roman Catacombs of the third century,¹ and occurs in Celtic MSS.,² and on Celtic sculptured stones,³ also on metal-work with Anglo-Celtic interlaced patterns.⁴ In later times it is used on mediæval sepulchral brasses and vestments,⁵ and in the sixteenth century as a bell-founder's mark.⁶ It also occurs in Norman sculpture on the moulding of the doorway of Great Canfield, in Essex.⁷

Fig. 59 is a border key pattern founded on squares set parallel (fig. A, Plate 1), and filled in with quadruple straight line spirals (fig. f, Plate 2), all the spirals having the same direction of twist. This pattern, although very common in classical art, only occurs but seldom in Celtic art, as on sculptured stones at Millport, in Buteshire, and at Abercromby, in Fifeshire.

Fig. 60 is founded on squares set parallel and divided into four triangles (fig. E, Plate 1), filled in with pattern (i. Plate 3). It is the same as (fig. 50), except that the straight line spirals with which the triangles are filled in have all the same direction of twist, instead of being alternately right and left handed.

Fig. 61 is founded on squares set parallel (fig. A, Plate 1), and filled in with quadruple straight line spirals (fig. h, Plate 3). The spaces between the lines of the key pattern are filled in with T-shaped figures. The pattern thus formed is a peculiar one. It is only found, as far as I know, in the Book of Durrow,⁸ on one stone in Northumberland,⁹

¹ Dr Smith's *Dict. of Christian Antiquities*, p. 497.

² Lindisfarne Gospels, *Palaog. Soc. Publ.*, plate v.

³ In Ireland, on two stones from Glencar, co. Kerry (*Trans. Royal Irish Academy* vol. xxvii. p. 41); on a stone near Clifony, co. Sligo (*Jour. R. Hist. and Archaeolog. Assoc. of Ireland*, vol. v. 4th series, p. 376); in the parish of Minard, co. Kerry (Rolt Brash's *Monuments of the Gaedhil*, plate xxiv.); in Scotland on a late grave-slab at Balquhiddy, in Perthshire (Stuart's *Sc. Stones*, vol. ii. plate lxvii.); on the Newton stone (*loc. cit.*, vol. i. plate i.); and on a slab from Craignarget, Glenluce (*Proc. Soc. Antiq. Scot.*, vol. xv. p. 251).

⁴ Found at Brongham, Westmoreland (*Jour. Brit. Archaeolog. Inst.*, vol. iv. p. 63).

⁵ *The Reliquary*, vol. xxii. plate v.; J. G. Waller's *Monumental Brasses of England*.

⁶ *Reliquary*, vol. xxii. plate vi.

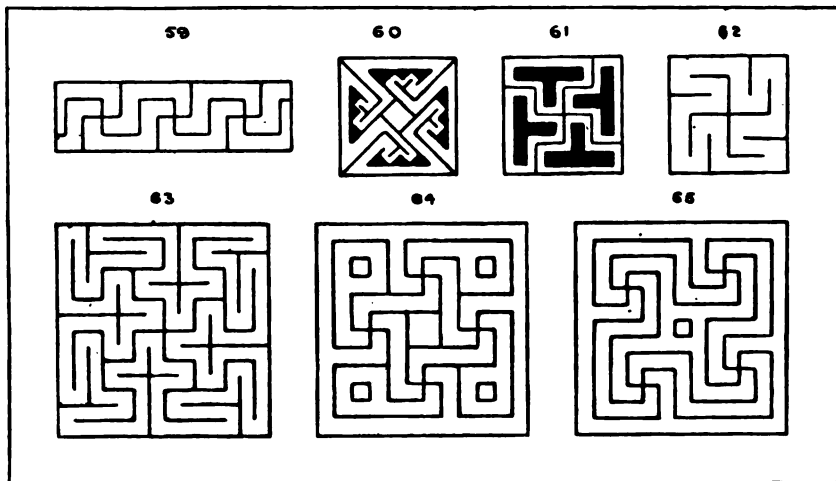
⁷ *Essex Archaeol. Soc. Trans.*, vol. ii. new series, p. 377.

⁸ Westwood's *Miniatures*, plate vii. It also occurs in the Gospels of MacRegol and the Cologne Penitential.

⁹ At Norham; Stuart, *Sc. Stones*, vol. ii. plate xxvii.

and on four stones in South Wales.¹ The ornamentation of the four Welsh stones is similar in other respects, and they all have Latin inscriptions in Irish minuscules, so that they are probably all of the same date, about the ninth century.

Fig. 62 is founded upon squares set parallel (fig. A, Plate 1), and filled in with quadruple straight line spirals (fig. f, Plate 3). This is the swastica symbol, which has been already arranged as a key pattern,



Figs. 59 to 65. Patterns formed by filling in Squares with Straight Lines arranged spirally.

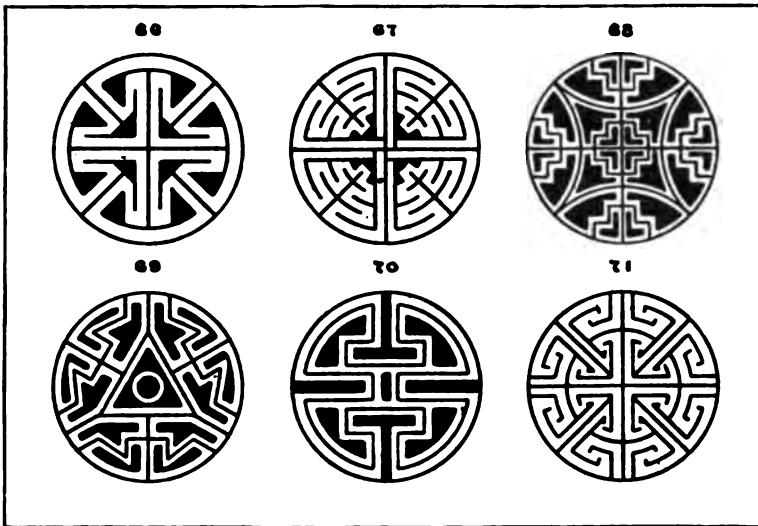
but whether it is intended as a symbol or ornament in Celtic art is doubtful.

Fig. 63 is a further development of fig. 61, and may be looked upon as four plain crosses arranged round a quadruple straight line spiral, instead of four T-shaped figures. This pattern is taken from a plate of inlaid metal-work from Moradabad, in India, and now in the Indus-

¹ At Carew and Nevern, in Pembrokeshire; at Golden Grove, Carmarthenshire; and Llantwit Major, Glamorganshire.—Westwood's *Lapidarium Walliæ*.

trial Museum at Edinburgh. It is curious that an almost identical design occurs upon one of the crosses at Kells, county Meath.¹

Fig. 64 is founded on squares set parallel (fig. A, Plate 1), and filled in with quadruple straight line spirals (fig. f, Plate 3), all the spirals having the same direction of twist. Every alternate square is left blank. This pattern is from a Roman pavement found at Wellow, near Bath,² and is given for the sake of comparison.



Figs. 66 to 71. Key Patterns within Circles.

Fig. 65 is the same as the preceding, except that all the squares are filled in instead of only every other one. This pattern is from a Roman pavement found at Newton St Loe, near Bath.³

Figs. 66 to 71 show the various methods of covering circular spaces with key patterns. The patterns are generally formed by dividing the

¹ O'Neill's *Irish Crosses*, plate xxix.

² Lyson's *Magna Britannia*.

³ J. B. Waring's *Ceramic Art*, plate 42.

circle into three sided and four-sided spaces by radial lines and concentric circles, and filling them in the same way as triangles and squares. Circles containing key patterns occur occasionally in Celtic MSS., such as the Book of Kells and the Gospels of MacDurnan, but, are unknown on sculptured stones, except on grave slabs in Ireland, and two stones near St David's, in Pembrokeshire, one of which bears the Irish name Gurmarc.¹ The resemblance between the labyrinths of the Middle Ages and some forms of key patterns has already been pointed out. The pattern which most nearly corresponds with the design of the labyrinths is that shown on fig. 67.² Key patterns contained in circles are common in Chinese ornament, and an example is given on fig. 70 for the sake of comparison.

Fig. 66 is a circle divided into eight equal three-sided spaces by radial lines, each of which is filled in with double straight line spirals (fig. b, Plate 3).

Fig. 67 is a circle divided into eight equal segments by radial lines, as in the preceding case, but the key pattern formed by portions of concentric circles branching out at right angles from the radial lines.

Fig. 68 is a circle divided into four equal segments by radial lines, the rest of the pattern being formed by four circular arcs and crosses.

Fig. 69 is a circle enclosing an equilateral triangle, the rest of the space being divided symmetrically by six radial lines, and sets of zigzag lines.

Fig. 70 is a circle divided into four equal spaces by radial lines, and filled in with key patterns.

Fig. 71 is a circle divided into eight equal segments, each of which is again divided by a concentric circle into a four-sided and a three-sided space, the former being filled in with a double straight line spiral (fig. b, Plate 2), and the latter with fig. b, Plate 3.

¹ Westwood's *Lapidarium Walliæ*, plate 60.

² Compare with labyrinth sculptured on one of the porch piers of Lucca Cathedral see *Assoc. Architect Soc. Rep.*, vol. iv. p. 257; and *Jour. Brit. Archaeolog. Inst.*, vol. xv. p. 218.

SPIRAL PATTERNS.

There are, broadly speaking, two distinct forms of spiral patterns used in Celtic art—(1) where the band of which the spiral is formed gradually expands into a trumpet-shaped end; (2) where the band of which the spiral is formed remains the same breadth throughout its whole length. The first of these forms is the earlier of the two, and is copied directly from the metal-work of pagan times. The expanding spirals are so arranged as to leave three-sided spaces (bounded by the various curves), which form the groundwork, and are ornamented with small circles, triangles, and almond-shaped figures, left white on a coloured or black ground. The spirals are not all of equal size and their centres are not generally arranged symmetrically (see fig. 85).

In the case of the second form of spiral-work, which is composed of bands of unvarying width, and is later, there is only left a plain black ground. This class of spiral-work is shown on figs. 80 to 82, and as has been already explained there is a corresponding key pattern to each, the spirals being composed of straight lines making bends at right angles, instead of being curved. The centres of the spirals are all placed symmetrically at the corners of squares, and the space occupied by each spiral is the same size.

Looked upon mathematically, a spiral is that curve which would be traced by a point continually moving along the radius of a circle whilst the radius was rotating.

There are various kinds of spirals known to mathematicians, but perhaps the simplest is that drawn by means of a pencil, a cylinder, and a piece of string. The pencil is tied to the end of the string, which is wound round the cylinder. The cylinder is placed upright upon a sheet of paper, and the curve traced by unwinding the string, taking care to keep it tight the whole time.

In Celtic art the spirals are generally composed of several bands diverging from one point: thus there are single spirals (fig. A, Plate 6), double spirals (fig. F, Plate 6), triple spirals (fig. O, Plate 6), quadruple spirals (fig. T, Plate 6), and so on. Each kind of spiral can have a different direction of twist, or in other words, can be right or left handed.

There are different ways of coiling the band forming the spiral ; if the bands are near together it is close coiled, and if far apart loose coiled. A spiral may either start from a central point, or there may be a circle in the middle. The various methods of ornamenting the centres of spirals are shown on Plate 6, figs. A to U, and also in figs. 88 and 89 ; in the latter case the central circle from which the spiral starts is ornamented with a large number of other spirals. Sometimes the

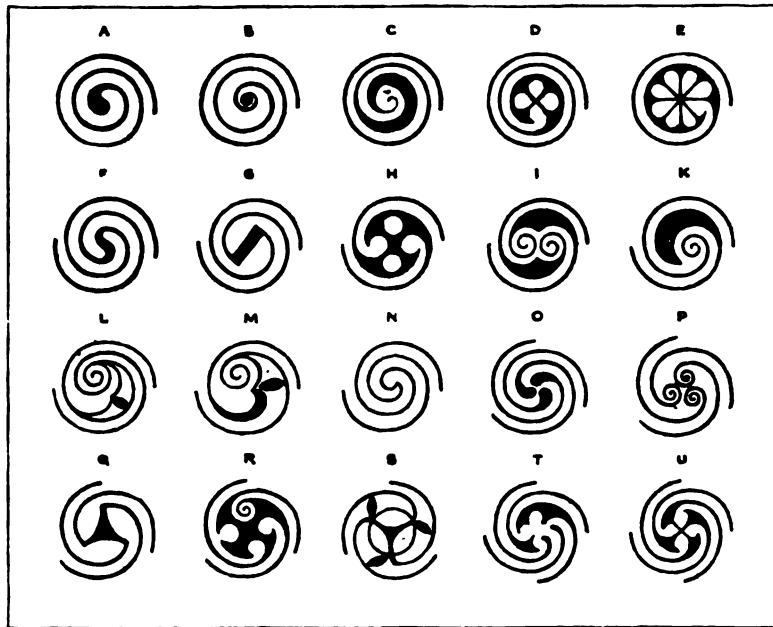


Plate 6. Methods of Ornamenting Centres of Spirals.

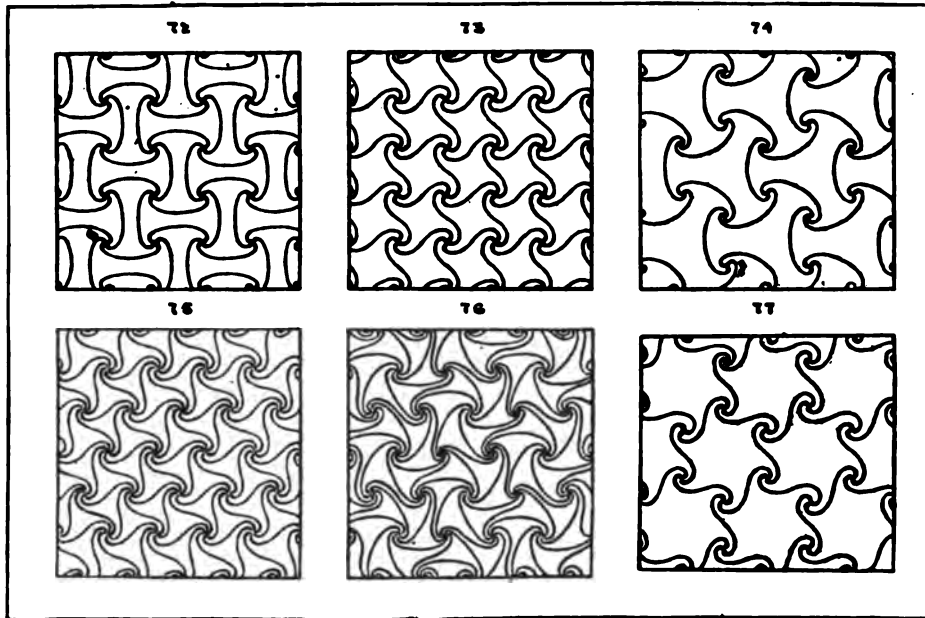
centres of the spirals are formed of bird's heads,¹ or figures of men with interlaced limbs.² When the centre of a spiral is not highly ornamented it generally starts from a pear-shaped black spot. It is close coiled at

¹ On Stones at St Vigeans and Birnie (Stuart, vol. i. pls. 42 and 70), and in the Book of Kells (*Palæog. Soc. Publ.*, pl. 55).

² In the Book of Kells (*Palæog. Soc. Publ.*, pl. 89).

the beginning, after which the bands get further apart, and then round the edge there are generally a few coils very close indeed ; finally, the band diverges at a tangent. After divergence the band expands in width, having a trumpet-shaped end, which joins on to the trumpet-shaped end of the next, leaving a black almond-shaped space between the two.

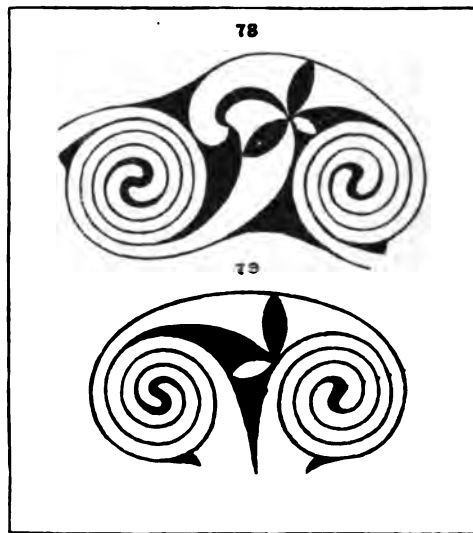
The variations in this class of spiral-work are made—(1) by altering



Figs. 72 to 77. Methods of arranging and connecting Spirals.

the number of bands of which the spiral is composed, making it single, double, triple, or quadruple ; (2) by making the spiral right or left handed ; (3) by the methods of coiling the spiral closely or loosely at different parts of the curve ; (4) by having ornamental centres ; (5) by the ways of arranging the centres of the spirals relatively to each other ; (6) by the ways of connecting the spirals together so as to form one design ; (7) by the different ornamental backgrounds.

Figs. 72 to 77 show the symmetrical ways of arranging the centres of spirals relatively to each other, and of connecting them together. The symmetrical ways of arranging the centres of spirals are founded on the fact previously mentioned that squares, equilateral triangles, and hexagons are the only regular plane figures which will entirely cover a surface, in whatever position the figures are placed, so that their corners meet round a point and their sides touch. There are only two ways of



Figs. 78, 79. Methods of connecting two Spirals.

connecting together two adjacent spirals. If the two spirals have an opposite direction of twist, the curve is C-shaped; but if they have the same direction of curve, it is S-shaped.

Fig. 72 has the centres of the spirals arranged on the square system, and connected by C-shaped curves, the twists of the spirals being alternately right and left-handed.

Fig. 73 has the centres of the spirals arranged upon the square system, and connected by S-shaped curves, all the spirals having the same direction of twist.

Fig. 74 has the centres of the spirals arranged upon the hexagonal system, and connected by C-shaped curves.

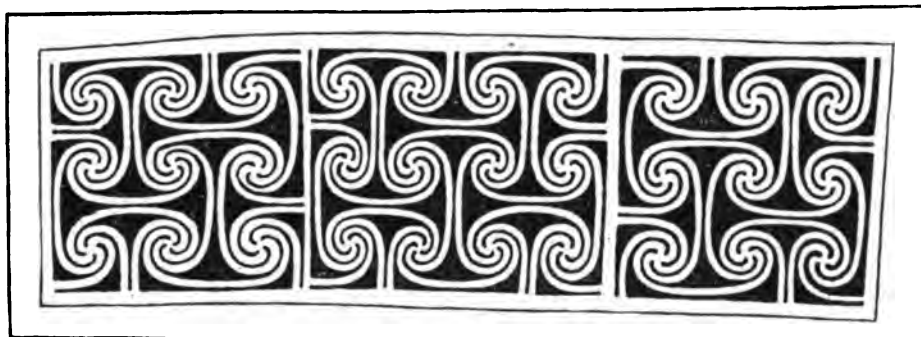
Fig. 77 has the centres of the spirals arranged upon the hexagonal system, and connected by S-shaped curves.

Fig. 75 has the centres of the spirals arranged upon the triangular system, and connected by S-shaped curves.¹

Fig. 76 has the centres of the spirals arranged upon the triangular system, and connected by C- and S-shaped curves alternately.

Plate 6 (figs. A to U) shows the various ornamental forms of centres

80^A



Spiral Pattern on the Font at Deerhurst, Gloucestershire.

for spirals. A to E are single spirals; F to N are double spirals; O to S are triple spirals; and T and U are quadruple spirals.

Figs. 78 and 79 show the methods of connecting the expanded ends of the first system of spirals. S-shaped connecting curves are avoided almost entirely in Celtic spiral-work, either by introducing a fresh spiral (generally a smaller one, and forming part of the background) between the two to be joined, or by the curious hook-shaped termination shown on fig. 78. Sometimes three spirals are connected in this way (see fig. 85), the third band hooking over the other two, and

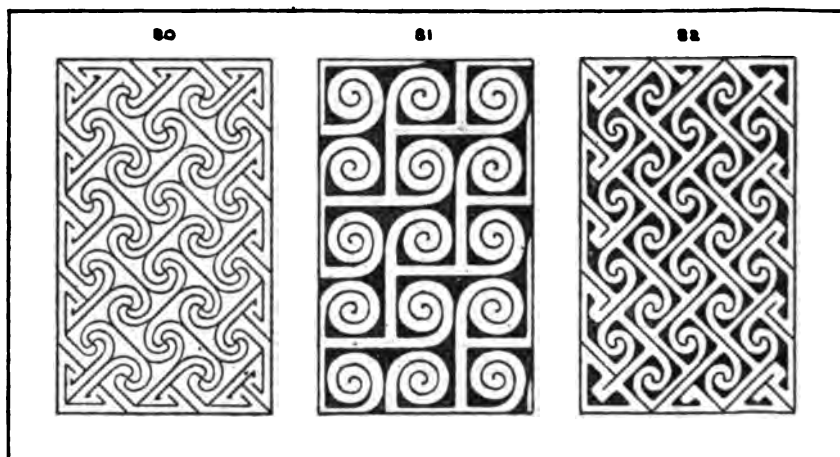
¹ A gold plate with a spiral pattern formed on this system is given in Schliemann's *Μυσηα*, p. 311.

in fact forming a kind of incipient spiral. On fig. 90 there will be seen an instance of an S-shaped connection.

Fig. 78 gives the method of connecting two spirals whose directions of twist are the same.

Fig. 79 gives the method of connecting two spirals whose directions of twist are opposite.

Figs. 80 to 82 show the second or later class of spiral-work arranged so as to cover a surface. All the bands are here of equal width, and there is no ornamental background.



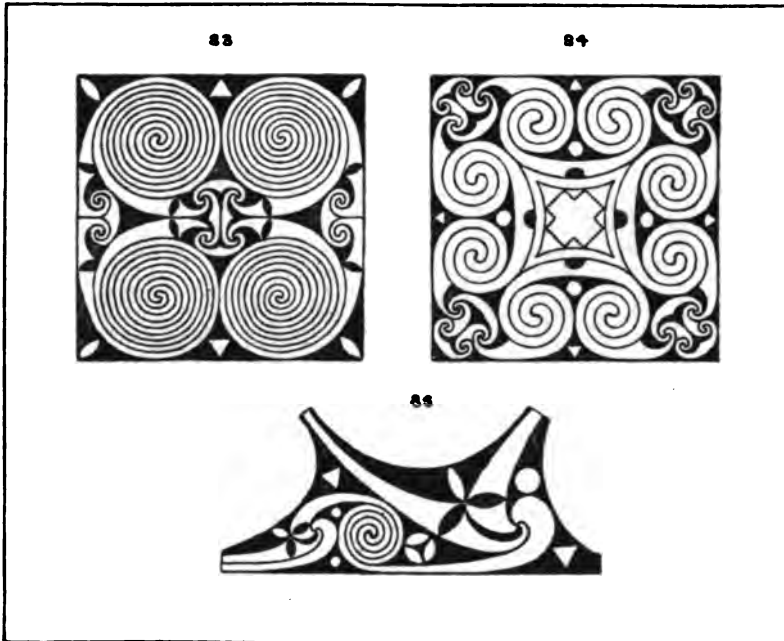
Figs. 80 to 82. Spiral Patterns founded on Squares.

Fig. 80 has the centres of the spirals arranged at the corners of squares placed diagonally (fig. B, Plate 1), and connected by C-shaped curves, as shown on fig. 72. The spirals are composed of four bands.

Fig. 80A is founded on squares set parallel (fig. A, Plate 1), the spirals being quadruple and joined by C-shaped curves (fig. 72). The drawings show 3 out of 8 panels surrounding the font at Deerhurst, in Gloucestershire.

Fig. 81 is founded on squares set parallel (fig. A, pl. 1), and the

spirals branch out on each side of lines running in a zigzag direction diagonally across the paper. The spirals are composed of a single band. The pattern is formed exactly upon the same principle as the key pattern (fig. 14), except that in one case the spirals are composed of curved lines and in the other of straight lines.



Figs. 83 to 85. Squares filled in with Spiral-Work.

Fig. 82 is formed like the preceding, only with spirals of two bands instead of only one.

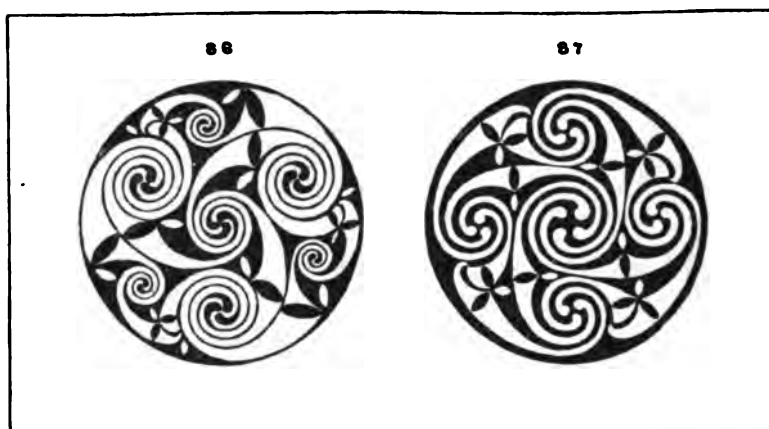
Figs. 83 and 84 show the methods of filling in squares with the first or earlier class of spiral-work. The centres are all arranged symmetrically upon the square system, and joined by C-shaped curves. Variety is effected by making some of the spirals large, with a great number of coils of fine lines, and others small, with only a few coils.

The triangular spaces of the background are ornamented with white circular, triangular, and almond-shaped figures.

Fig. 85 shows the method of ornamenting the spaces left between the spirals.

Figs. 86 and 87 show the methods of filling in circles with the first class of spiral-work.

Fig. 86 has a central spiral connected by C-shaped curves with three others arranged symmetrically round it. The remaining spaces



Figs. 86, 87. Circles filled in with Spiral-Work.

are filled in with 3 smaller spirals connected to the 3 large ones by an S-shaped curve, and the hook-shaped form shown on fig. 78.

Fig. 87 has a central spiral connected by C-shaped curves, with four others arranged symmetrically round it, the four outer circles being connected together by the hook-shaped form shown on fig. 78.

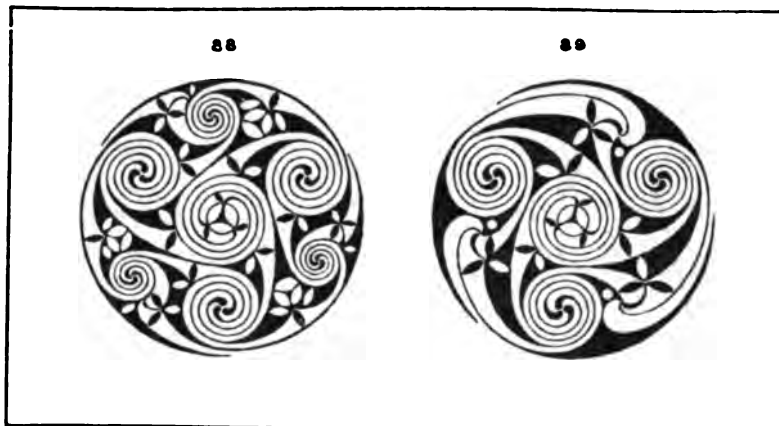
Figs. 88 and 89 show the large ornamental circular centres for spirals. The circles are filled in like those on the two preceding figures except that the bands of the spiral of which it forms the centre run into the inside of the circle, and are there connected with some of the other spirals. These examples are from the Book of Durrow,¹ and other very

¹ Westwood's *Miniatures*, pl. 7 ; also copied into Stuart's *Sc. Stones*, vol. ii.

elaborate specimens may be found in the Book of Kells¹ in the Lindisfarne Gospels,² in the Irish Gospels at Paris, and on the Tara Brooch.

Fig. 88 is the ornamental centre of a triple spiral, composed of three large and three small spirals arranged symmetrically round a central one. The three small outer spirals are connected with the one of which this is the ornamental centre by a hook-shaped form, as shown on fig. 78. All the other connections are C-shaped.

Fig. 89 is the same as the preceding, except that the three small outer spirals are omitted.



Figs. 88, 89. Ornamented Centres of Spirals.

Fig. 90 is from the "Quoniam quidem" Initial page in the Book of Durrow,³ and is given as an example of spiral-work filled into an irregular space. The centres of the spirals are disposed irregularly, and connected by S, C, and hook-shaped curves. The background is ornamented in the usual way. Spiral-work is especially adapted to fitting into irregular spaces, as the size of the spirals may be altered at pleasure.

¹ *Palæog. Soc. Publ.*, pls. 55 and 58.

² *Palæog. Soc. Publ.*, pls. 4, 5, 6, and 22.

³ *Westwood's Miniatures*, pl. 6.

It is also well suited to the forms of curved letters, such as the Q, which begins the Gospel of St Luke in Latin.

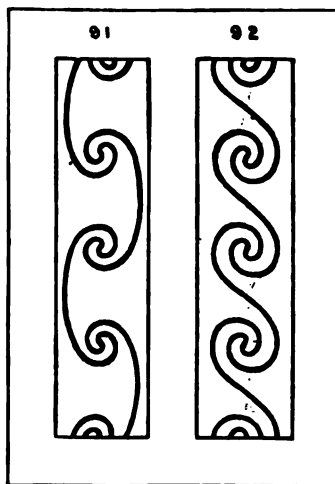
Fig. 91 is a border pattern composed of right and left handed double spirals alternately connected by C-shaped curves.

Fig. 92 is a border pattern composed of double spirals of the same direction of twist connected by S-shaped curves.

Fig. 93 is one half of the semicircular border round the miniature of David, in the so-called Psalter of St Augustine (Brit. Mus. Vesp., A. i.).



Fig. 90. Initial Letter in the Book of Durrow.



Figs. 91, 92. Spiral Border Patterns.

Fig. 94 (see p. 308) is a design by the Author of this paper founded on the method of arranging and connecting spirals, as shown in fig. 76.

LOCALITIES WHERE THE DIFFERENT ORNAMENTS OCCUR.

Note.—The Scottish Stones will be found engraved either in Stuart's *Sculptured Stones of Scotland* or in the *Proc. Soc. Ant. Scot.*; the Irish Stones in O'Neill's *Crosses of Ireland* and Petrie's *Inscriptions in the*



Fig. 98. Half of a Semicircular Border, Psalter of St Augustine.

Irish Language; the Welsh Stones in Westwood's *Lapidarium Walliæ*; the Isle of Man Stones in Cumming's *Runic Remains of the Isle of Man*. Some of the English examples are engraved in Stuart's *Sculptured Stones*, others will be found in Lyson's *Magna Britannia* and the Journals of the various Archæological Societies, but, as yet, no complete collection has been made. The Celtic MSS. will be found illustrated in Professor Westwood's *Palæographia Pictoria Sacra*, and his *Miniatures*; in the Publications of the Palæographical Society; in the National Irish MSS. published by the Government; and in the works of Count Bastard, Sylvestre, Noel Humphreys, Shaw, Astle, &c.

Fig. 1.—Kells, co. Meath.

Fig. 2.—Benvie, Forfarshire; Drainie, Morayshire; Nerern, Pembrokehire.

Fig. 3.—Instances of the occurrence of this variety of the key pattern in Celtic art are not yet known.

Fig. 4.—Crail, Fifeshire; Monasterboice (S.E. cross), co. Louth; Kells, co. Meath.

Fig. 5.—Instances of the occurrence of this variety of the key pattern in Celtic art are still unknown.

Fig. 6.—Farnell, Invergowrie, and Benvie, Forfarshire; St Andrews, Fifeshire; Kilkerran, Argyllshire; Liberton, Edinburghshire; Drainie, Morayshire; Warkworth, Northumberland; Billingham, Durham; Pen Arthur, Pembrokehire.

Fig. 7.—Examples of the occurrence of this variety of the key pattern in Celtic art are not yet known.

Fig. 8.—Kilkerran, Argyllshire; Clonmacnois (Sechnasach grave-slab, A.D. 931) King's co.; Llangaffo, Anglesey; Golden Grove, Carmarthenshire; Carew and Llanwnda, Pembrokehire. A double border key pattern of this type occurs on the Maen Achwynfan, Flintshire; and at Penmon, Anglesey.

Fig. 9.—MS. Brit. Mus. Harl., 2788, fol. 3, Penmon, Anglesey.

Fig. 10.—MS. Brit. Mus. Harl. 2788, fol. 3.

All the foregoing are border patterns, but surface patterns belonging to the same class occur in the following localities:—Dunfallandy, Perth-

shire ; Crail, Fifeshire ; Eassie, Forfarshire ; Abbotsford, Roxburghshire ; Rossie Priory, Forfarshire ; Rosemarkie, Ross-shire ; Farr, Sutherland. MS. St Gall Gospels.

Fig. 11.—MS. St Gall Gospels, “*χρ̄i autem generatio*,” initial page (Westwood’s *Miniatures*, pl. 26).

Fig. 12.—MS. St Gall Gospels.

Fig. 13.—MS. Book of Durrow (Westwood’s *Miniatures*, pl. 13).

Fig. 14.—Maiden Stone, Chapel of the Garioch, Aberdeenshire ; Nigg, Ross-shire ; Golspie and Farr, Sutherlandshire ; Kirriemuir, Kingoldrum, St Vigeans, Inchbrayock, Aberlemno, and Monifieth, Forfarshire ; Mugdrum, St Andrews, Fifeshire ; St Madoes, Fowlis Wester, Meigle, and Dunkeld, Perthshire ; Eilanmore, Argyllshire ; Rosemarkie, Ross-shire ; Abercorn, Linlithgowshire ; Canna, I. of Skye ; Silian, Cardiganshire ; Killamery, co. Kilkenny ; Monasterboice (W. Cross), co. Louth ; Kells, co. Meath ; MSS. Lindisfarne Gospels (*Palæog. Soc.*, pl. 5).

Similar patterns but with the straight line spirals drawn with very fine lines close together, making a great many turns, occur in the Book of Durrow (Westwood’s *Miniatures*, pl. 5), in the Gospels of Mac Durnan (*idem*, pl. 22) and in the Book of Kells (*Palæog. Soc.*, pls. 58 and 89).

Fig. 15.—MS. Lindisfarne Gospels (Westwood’s *Miniatures*, pl. 12).

Fig. 18.—MS. Gospels of Mac Durnan (Four Evangelists, Miniature).

Fig. 19.—Tynan Abbey, co. Armagh ; Monasterboice (S.E. Cross), and Termonfechin, co. Louth. MS. Gospels of Mac Durnan (Miniature of St John and initial pages of St Mark’s and St Luke’s Gospels).

Fig. 20.—MS. St Gall Gospels (Miniature of Crucifixion).

Fig. 21.—MSS. Psalter of St John’s College, Cambridge (Miniature of David and Goliath) ; St Gall Gospels (Westwood’s *Miniatures*, pls. 26, 27, and 30).

Fig. 22.—Norham, Northumberland.

Fig. 23.—Meigle, Perthshire ; Farnell.

Fig. 24.—Kells, co. Meath.

Fig. 25.—MS. Brit. Mus. Harl. 2788, fol. 50.

Fig. 29.—Rosemarkie, Ross-shire.

Fig. 32.—St Andrews.

Fig. 33.—Metal-work—The casket known as the “Domnach Airgid.”

Double border key patterns of a similar kind occur in the Irish Psalter, Brit. Mus. Vit. F. xi. fol. 1 and 15.

Fig. 34.—Clonmacnois, King's co.; MSS. Brit. Mus. Psalter Vesp. A. i. fol. 30; Bæda Tib. C. ii.; Codex Aureus, Harl. 2788.

Fig. 35.—MS. Brit. Mus. Biblia Gregoriana Bibl. Reg. I.E. vi.

Fig. 38.—Rosemarkie, Ross-shire. MSS. St Gall Gospels (Miniature of Christ in Glory), St Chad's Gospels (Westwood's *Miniatures*, pls. 22 and 23), Book of Kells (*Palæog. Soc.*, pl. 55).

Fig. 39.—Inchcolm; Gattonside, near Melrose; Clonmacnois, King's co.; Penally, Pembrokeshire; Bronze plate with Crucifixion, in the Museum of the Royal Irish Academy (Stuart's *Sculptured Stones*, vol. ii. pl. 10); Ivory diptych in the Church of St Genoeis, Elderen, Limburg (Westwood's *Miniatures*, pl. 52); Brit. Mus. MS. Irish Psalter, Vit. F. xi. fol. 38.

Fig. 42.—Shandwick, Ross-shire; Farr, Sutherlandshire; Meigle, Perthshire; St Andrews, Fifeshire; Rosemarkie, Ross-shire. MSS. Lindisfarne Gospels (*Palæog. Soc.*, pls. 4 and 5); Gospels of Mac Durnan (Westwood's *Miniatures*, pl. 22); Book of Kells (*idem*, pl. 11); St Chad's Gospels (*Palæog. Soc.*, pl. 35).

Fig. 43.—Gospels of Mac Regol (Westwood's *Miniatures*, pl. 16).

Fig. 46.—Nigg, Ross-shire; Invergowrie, Forfarshire; Llantwit Major, Glamorganshire; Llangevelach, Brecknockshire; MS. Book of Kells (Westwood's *Miniatures*, pl. 9).

Fig. 47.—MS. Book of Kells (Westwood's *Miniatures*, pl. 11).

Fig. 48.—Keils in Knapdale, Argyllshire; MS. Gospels of Mac Durnan (initial page of St Matthew's Gospel); Book of Kells (*Palæog. Soc. Publ.*, pl. 58).

Fig. 49.—Lindisfarne, Durham; Drainie, Elginshire; Coychurch, Glamorganshire; MS. St Chad's Gospels (Westwood's *Miniatures*, pl. 23, *Palæog. Publ.*, pl. 21).

Fig. 50.—The same as fig. 48.

Fig. 51.—MS. Gospels of Mac Durnan (Miniatures of Four Evangelists, St Matthew and St Luke).

Fig. 52.—MS. St Gall Penitientiale (Westwood's *Miniatures*, pl. 28).

Fig. 53.—Dupplin Castle, Perthshire; Invergowrie, Forfarshire; St Andrews, Fifeshire; Monifieth, Forfarshire; Lindisfarne, Durham.

Fig. 54.—MS. Gospels of Mac Durnan (Westwood's *Miniatures*, pl. 22).

Fig. 55.—MS. St Gall Penitential (Westwood's *Miniatures*, pl. 28).

Fig. 56.—MS. Gospels of Mac Durnan (Miniature of St Matthew).

Fig. 57.—Alnmouth, Northumberland; Lindisfarne, Durham.

Fig. 58.—Invergowrie, Forfarshire; St Andrews, Fifeshire; Llangevelach, Llantwit Major, Glamorganshire; Tuam, co. Galway; Termonfechin, co. Louth; Winwick, Lancashire.

Fig. 59.—Abercromby, Fifeshire; Millport, Buteshire.

Fig. 60.—St Andrews, Fifeshire; Barrochan, Renfrewshire; Margam Abbey, Glamorganshire; Merthyr Mawr, Carew, and Nevern, Pembrokeshire; Golden Grove, Carmarthenshire; Clonmacnois S. Cross, co.

Fig. 61.—Norham, Northumberland; Caven and Nevern, Pembrokeshire; Golden Grove, Carmarthenshire; Llantwit Major, Glamorganshire; MS. Book of Durrow (Westwood's *Miniatures*, pl. 7); last page of Gospels of MacRegol.

Fig. 62.—Glencar, co. Kerry; MS. Lindisfarne Gospels (*Palaeog. Soc. Publ.*, pl. 5); Cologne Penitential (Westwood's unpublished tracings).

Fig. 63.—Inlaid metal-work plate from Moradabad, India (Industrial Museum, Edinburgh). Very similar patterns also on cross at Kells (O'Neill, pl. 29), and MS. Gospels of Mac Durnan.

Fig. 64.—Roman pavement found at Wellow, near Bath.

Fig. 65.—Roman pavement found at St Loe, near Bath.

Fig. 66.—MS. Gospels of Mac Durnan (Initial page of St Luke's Gospel).

Fig. 67.—MS. Book of Kells (Westwood's *Miniatures*, pl. 10).

Fig. 68.—MS. Book of Durrow (Westwood's *Miniatures*, pl. 7).

Fig. 69.—On metal-work; the Tara Brooch in the Museum of the Royal Irish Academy.

Fig. 70.—On a Chinese teapot.

Fig. 71.—Pen Arthur, near St Davids, Pembrokeshire.

Plate 6, figs. D, E, F, O, P, R, T, and U.—MS. Stockholm Gospels (Westwood's *Miniatures*, pl. 2).

Figs. C, I, K, L, M, N, and S.—MS. Book of Durrow (Westwood's *Miniatures*, pls. 6 and 7).

Figs. G and Q.—MS. St Gall Gospels (Westwood's *Miniatures*, pl. 26).

Figs. 78 and 79.—MS. Lindisfarne Gospels.

Fig. 80.—Rosemarkie, Ross-shire ; Bradford-on-Avon, Wiltshire.

Fig 80A.—Deerhurst, Gloucestershire.

Fig. 81.—Meigle, Perthshire.

Fig. 82.—Lemanaghan, King's co. (Rev. James Graves's "Church, and Shrine of St Manchan") ; Drainie, Elgin.

Fig. 83.—MS. Book of Kells (Westwood's *Miniatures*, pl. 9).

Fig. 84.—MS. Book of Kells (Westwood's *Miniatures*, pl. 10).

Fig. 85.—MS. Book of Durrow (Westwood's *Miniatures*, pl. 7).

Fig. 86.—MS. St Gall Gospels (*Miniature of St John*).

Fig. 87.—MS. Stockholm Gospels (Westwood's *Miniatures*, pl. 52).

Figs. 88 and 89.—MS. Book of Durrow (Westwood's *Miniatures*, pl. 7).

Fig. 90.—MS. Book of Durrow ("Quoniam quidem" initial page).

Fig. 91.—Dunfallandy, Perthshire ; Abbotsford, Roxburghshire.

Fig. 92.—Golspie, Sutherlandshire ; Strathmartin, Forfarshire ; Abercrombie, Fifeshire.

Fig. 93.—Psalter Brit. Mus. Vesp. A1, fol. 30 (*Miniature of David*).



II.

NOTICE OF A BRONZE CALDRON FOUND WITH SEVERAL SMALL KEGS OF BUTTER IN A MOSS NEAR KYLEAKIN, IN SKYE; WITH NOTES OF OTHER CALDRONS OF BRONZE FOUND IN SCOTLAND. BY JOSEPH ANDERSON, LL.D., ASSISTANT SECRETARY AND KEEPER OF THE MUSEUM.

The bronze caldron which is the subject of the present notice was found by some men digging peats in a moss near Kyleakin, in the island of Skye. It is interesting as an example of a class of ancient culinary utensils of somewhat rare occurrence in Scotland—at least rarely seen in a condition sufficiently entire to show their form and structure. The circumstances in which this example was found were also interesting, on account of its apparent association with several kegs or small barrels of butter, which were found by the same persons at the same time, and, as they state, in the same place—the whole of the articles being said to have been found in close juxtaposition. As the articles thus found were not seen *in situ* by any one capable of subjecting this apparent association to the test of a rigidly scientific scrutiny, it is now impossible to ascertain with certainty what may have been their actual associations or relations with regard to the peat, or to the subsoil, or to each other. It is so far fortunate that one of the kegs of butter has been preserved, and is now along with the caldron deposited in the Museum. They were seen, at Kyleakin, by the Rev. Hugh M'Kenzie Campbell, M.A. (now at Aberlour), when on a visit to the island of Skye in the autumn of last year. Being interested in the unusual circumstances of the discovery, he communicated with Professor Cossar Ewart, and the result was that the caldron and one of the small kegs of butter were sent up to Edinburgh for Professor Ewart's inspection. I heard of them from Miss MacLagan, who suggested to Professor Cossar Ewart that they were likely to be interesting to the Society of Antiquaries, and through the courtesy of Professor Ewart I was placed in communication with the Rev. Mr Campbell, who was kind enough to negotiate their purchase from the finder.

The keg of butter is a wooden vessel, barrel-shaped, but hollowed out of a single piece of wood. It measures 14 inches in height by 13 inches in greatest diameter. It now wants both the top and bottom, which have been inserted in ledges prepared to receive them. On the sides of the keg there are two slight projections, with holes through them, bored apparently with a hot iron. The bulk of the butter which the keg contained has been scooped out since it was found, leaving a coating of several inches in thickness, adhering to the sides of the vessel. It is white, hard, dry, and inodorous, with a perceptible admixture of cow-hairs. I am indebted to Mr W. Ivison Macadam, F.C.S., Lecturer on Chemistry, for the following analysis of it :—

Analysis of Sample of Bog Butter found at Kyleakin, Skye, 1884, and received from Joseph Anderson, LL.D., Society of Antiquaries of Scotland :—

Water,	0.786
Fat, and fatty and volatile acids (matter soluble in ether),	98.275
Casein, milk sugar, &c.,	0.811
Ash or mineral matter,	0.126
	<hr/> 99.998

Appearance of Sample, &c.—White ; greasy ; cheese smell ; pieces of wood adhering.

Hair.—Present (red).

Application of Heat (100° C.) *to Sample.*—Fuses at once to a rich yellow liquid with floating curd.

Appearance after Purification with Ether.

(1) *Solid.*—Rich yellow colour and butter odour.

(2) *Heated and Liquid.*—Very rich yellow oil.

Fusing point of purified Fat, 44°·4 C.

Phosphoric Acid present in ash.

W. IVISON MACADAM, F.C.S., F.I.C., &c.,
Lecturer on Chemistry.

ANALYTICAL LABORATORY, SURGEONS' HALL,
Edinburgh, 28th July 1885.

The results of this analysis correspond very closely with those of the analyses of the bog butter from various localities in Scotland, England, and Ireland, previously given by Mr W. Ivison Macadam in connection

with his notice of the larger keg of butter found in a bog in Glengell, Morvern, Argyleshire,¹ and now also in the Museum.

It appears from inquiries made by the Rev. Mr Campbell, that the bronze caldron (fig. 1) was found in close juxtaposition with the kegs of butter, under a depth of about $7\frac{1}{2}$ feet of peat. It is a vessel of considerable size, semi-globular in form, and measuring 18 inches in diameter and about 12 inches in depth. It is formed of thin-beaten bronze, and seems to have been originally hammered out of a single

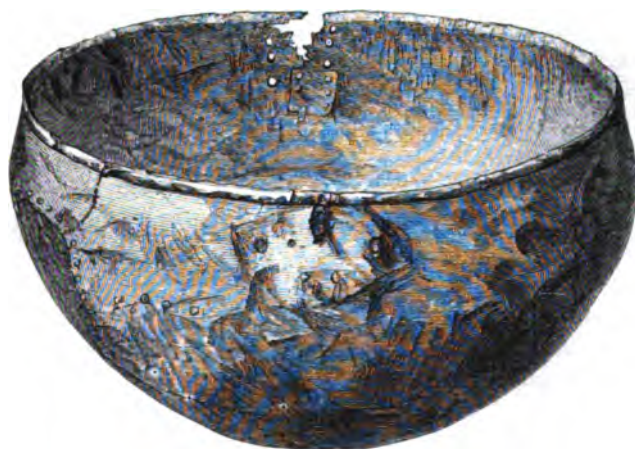


Fig 1. Bronze Caldron, found at Kyleakin, Skye (18 inches diameter).

sheet of metal, but is now very much patched in the bottom, the patches being also very clumsily put together with rivets made of small clip-pings of bronze bent in the middle, and having their heads and ends clinched flat, after the manner in which the patent flat-headed paper-fastener of brass is now used. The rim and handles are gone. The handles seem to have been fastened to the sides by rivets. On one side

¹ See the paper entitled "On the Results of a Chemical Investigation into the Composition of the Bog Butters and of Adipocere, and the Mineral Resins, with Notice of a Cask of Bog Butter found in Glengell, Morvern, Argyleshire," and now in the Museum. By W. Ivison Macadam, F.C.S. F.I.C., in the *Proceedings*, vol. xiii. pp. 204-223.

there are three rivet-holes, the lower two of which are 4 inches apart, and 2 inches below the brim of the vessel, the third being about half-way between them and close under the brim. On the other side, the place where the handle has been fixed is defective, and has been considerably patched.

Similar caldrons of semi-globular form have been occasionally found in somewhat similar circumstances in other parts of Scotland. One such instance is recorded in the *Proceedings* of the Society.¹ In cutting a drain in a haugh or meadow adjoining the Water of Eye, near Cockburnspath, Berwickshire, in or about the year 1837, two caldrons of thin-beaten bronze was found lying on the subsoil below the peat. They were of different sizes—one measuring 13 inches diameter and $7\frac{1}{2}$ inches in depth, the other 21 inches diameter and 10 inches in depth. When found, the one caldron was inverted over the other, and both were filled with a quantity of implements and other articles of bronze and iron, but chiefly of the latter material. Among the iron implements are hammers, knives, bolts, hooks, staples, punches, a gouge, some broken buckles and blades, a chain with pot-hooks, and the outer shell of a lamp or cruse of ancient form. Among the bronze objects was the bowl of a Roman patella, $6\frac{3}{4}$ inches diameter. The whole deposit seemed to have been contained in a wooden pail of large size, as there were found with it a number of iron hoops and two iron rings $4\frac{1}{2}$ inches diameter, with staples and nails indicating a thickness of about $\frac{3}{4}$ inch for the wooden staves. These caldrons with their contents are now in the Museum.

From the nature of the objects found with these two caldrons, it is evident that they belong to a time subsequent to the Christian era, and probably after the period of the Roman colonisation of the south of Scotland. They have several points of correspondence with the Skye caldron. They are each beaten out of one sheet of metal; they want the rims and handles, and the handles have each been fastened on by three rivets. The larger of the two is also much patched in the bottom.

But there is another variety of bronze caldron of larger size, which belongs to an earlier time, and may be classed as pertaining to the closing period of the Age of Bronze.

¹ *Proceedings*, vol. i. p. 43.

One such caldron (fig. 2) found in the Moss of Kincardine, near Stirling, in 1768, and presented to the Museum by John Ramsay of Auchtertyre, in 1782, measures 25 inches in diameter and 16 inches in depth. It is made of thin plates of bronze riveted together, the rounded bottom part being in one piece, and the upper part in two separate sections, the junction of which is connected by a broad band



Fig. 2. Bronze Caldron, found in the Moss of Kincardine (25 inches diameter).

embossed with circles. The rim is strengthened by two bands of sheet bronze, rolled to a cylindrical form, and fastened on so that their edges interlock with the upper edge or brim of the vessel. The marks of the attachment of the handles remain at either side, but the handles themselves are gone.

There is in the Society's collection another caldron of this description, which came from the collection of the late Mr Archibald Leckie,

F.S.A. Scot., Paisley. Having been bequeathed to the Society by him, and received after his death, the precise locality of its discovery is not known, but was stated to have been somewhere in the west of Scotland. It is constructed somewhat differently from that found in Kincardine Moss, and has more resemblance to a class of caldrons of which a considerable number of examples have been found in Ireland. The body of the caldron is more compressed vertically, the neck more constricted,



Fig. 3. Bronze Caldron, from the west of Scotland (25 inches diameter).

the brim wider, and turned slightly upwards. The body of the vessel is formed of four tiers of plates above the concave bottom-plate. The two middle tiers are riveted together in lengths of three to the circumference of the vessel; the two tiers next the brim and bottom are of two lengths each. The rivets have ornamental and conical heads, projecting nearly a quarter of an inch on the outside. The upper part is ornamented with short, parallel rows of knobs embossed. The rim,

which is 2 inches wide, is formed by two cylindrical rolls of the thin metal, on the outer and inner side of a flat band, with a corrugation in the middle, and pierced with rows of circular holes on either side. The handle-rings are solid castings of bronze, 4 inches in diameter, inserted in staples or loops which pass through the brim, and are fastened by ties to the inside. The extreme diameter of the vessel is 25 inches, the depth 14 inches, and the diameter of the opening of the mouth 15 inches. Caldrons of similar form and construction are found in Ireland, but not on the Continent of Europe.

Rings and staples pertaining to such caldrons as these were found in connection with the hoard of bronze swords, spear-heads, and other articles dredged up from the bottom of Duddingston Loch; and also in association with socketed celts and broken swords of bronze at Kilkerran, in Ayrshire. This association shows that the large spheroidal caldron, formed of plates riveted together and furnished with a brim and handles of this peculiar construction, belongs at least to the closing period of the Bronze Age.

III.

NOTICES OF THE DISCOVERY OF A STONE COFFIN AND FRAGMENT OF A CELTIC CROSS AT LETHNOTT, FORFAIRSHIRE, AND OF A BRONZE CELT AT DURNESS, SUTHERLANDSHIRE. BY HEW MORRISON, F.S.A. SCOT., SMITH'S INSTITUTION, BRECHIN.

In the autumn of last year the church of Lethnott underwent considerable repairs to the flooring on account of its decay by dry-rot. It was deemed advisable to remove the pulpit from the middle of the south wall, where it had stood since the Revolution, and place it at the east end of the church, over the spot where the altar of the original church stood. In order to get this done, it became necessary to clear out a large quantity of earth and stones to allow a cross sub-wall to be built to support the beams on which the floor was to rest. While doing this the workmen came upon a stone coffin, which from its weight and position, they were unable to move, and before they had discovered what it was, they had broken off its sides as well as damaged it in other

respects. Many of the pieces broken off were used in the sub-wall just being built.

The minister, who was from home at the time, was only made aware of the discovery by accident. He made every effort to get the pieces of the coffin, and in this he was tolerably successful. It is now preserved in front of the church. It is formed of the reddish conglomerate stone common in the glen, and was hollowed out in rather rough fashion. The chisel marks are still quite fresh. The hollowed part of the coffin is 5 feet 6 inches in length measured along the bottom, and at the top it will measure about 6 inches more. It is 18 inches broad at the shoulders, with a depth of 10 inches. This coffin is that probably referred to in the Statistical Account of the parish written in 1799. It is there stated that a former minister, who had lived a life of celibacy, had left money to roof the church with lead. The church was long known as the "Lead-kirk," and by that name Mr Robert Edward, minister of Murroes, distinguished it in the map which accompanied his "Description of Angus" in 1678. The minister who gifted the leaden roof to the church was said (according to the tradition) to have been buried in a stone coffin under the altar.

While the fragments of the stone coffin were being collected, a fragment of a Celtic cross was picked up, which the minister the Rev. Mr Cruickshank sent to me, and which I have sent up to Dr Anderson. So far as known, no other trace of any stones similarly sculptured has been discovered in the parish of Lethnott, though in the neighbouring parish of Menmuir there are several specimens.

[The fragment of a Celtic cross thus curiously found at Lethnott measures 9 inches in length, 4 inches in breadth, and 2 inches in thickness. It is of the grey fissile rock of the Old Red Sandstone formation, familiarly known as the Forfarshire Flagstones, and consists apparently of the upper limb or head of a small cross having a circular ring or "glory" connecting the shaft, arms, and summit. As will be seen from the accompanying engravings, it presents on one face a very characteristic example of Celtic decoration, bordered by a slightly rounded edging of about $\frac{1}{4}$ inch in width. It presents a peculiarity not often seen in

decorative work of this kind, inasmuch as the central circular pattern of diverging spirals is connected with the interlaced scroll-work patterns



Fig 1. Portion of Stone Cross found at Lethnott, Forfarshire. Reverse, ornamented with Celtic patterns (9 inches in length).

on either side of it, the escaping ends of the spirals being continued to form the groundwork of the interlaced ribbon patterns above and below

it, and thus rendering the whole of the decoration of the panel one continuous and symmetrical series of patterns of different designs. The upper circle of interlaced-work appears incomplete, and had it been complete, the stone would have been about 2 inches longer. The upper end now shows no sign of fracture, but both ends and sides have been evidently used for a considerable time as convenient surfaces for sharpening edge tools. But the opposite face of the stone, which bears the remains of an inscription, shows that originally the stone must have been longer, because the first line of the inscription evidently shows only about half the lengths of the letters. Unfortunately they are so mutilated that it is now impossible to determine them with certainty. The first has been a circular letter with a central cross-stroke, and there are apparently six endings of long letters which follow each other at regular distances and fill up the line—as it might be filled by the word ENNII. The other two lines are well preserved, and quite distinctly legible :—

FILII
MEDICII

It is unfortunate that the line which is mutilated should be that containing the name of the person commemorated, but the formula is obviously the one so common on the early Christian monuments of Britain, in which the name of the person is given in the genitive case with the addition of the patronymic formula also in the genitive case. The meaning of the inscription may be thus taken to be—

[THE STONE] or [THE CROSS]
[OF ENNIUS?]
THE SON OF
MEDICIUS

The names Ennius and Enniaun occur on inscribed monuments in Wales; but the reading here, it must be remembered, is purely conjectural. The Llangian stone in Wales has the inscription :—

MELI MEDICI FILI MARTINI JACIT,

but the name of Medicus otherwise is unknown. The peculiar form of the letters in the Lethnott inscription has considerable resemblance

to the style of the manuscripts known as the Gospels of MacDurnan, in the library of the Archbishop of Canterbury at Lambeth, and the Gospels of MacRegol in the Bodleian Library, Oxford, both of the ninth



Fig. 2. Portion of Stone Cross found at Lethnott, Forfarshire.
Obverse, with Inscription (9 inches in length).

century. With the exception of this fragment and the St Vigean's stone, no monument in Scotland ornamented with Celtic decoration

bears an inscription in any other character than Ogham. The St Vigean's stone is still unique, inasmuch as it has its inscription carved in the Celtic language and character. The Lethnott fragment is also unique, inasmuch as it has its inscription carved in the Latin language, but in Celtic forms of lettering used by the writers of the Gospels in the Celtic monasteries of the ninth century.

Professor J. O. Westwood, Oxford, the highest living authority on Celtic Palæography, who has seen the engravings of the Lethnott stone, gives his opinion that, judging from the interesting forms of the letters of the inscription, its date can scarcely be later than the commencement of the ninth century, and that both letters and ornament seem to indicate a strong connection with Iona and Lindisfarne acting on Brechin and its neighbourhood. Mr Romilly Allen, who has also seen the engraving, observes that the lettering resembles that on a fragment of a cross found at Carlisle (*Arch. Jour.*, xv. p. 85), and also that on a belt-clasp with Daniel in the Lion's Den on it (*Martigny's Dict.*, p. 258), and that the interlacing pattern is found at Monasterboice and Clonmacnois.]

Bronze Celt from Durness.—The accompanying bronze Celt was found by one of the labourers employed in making the road along the eastern shore of Loch Hope from Cashel-Dhu to Hope Lodge. Knowing little of the nature of the object he took it to his lodgings, where it lay for two or three weeks on the kitchen window sill. It was there found by Mr Donald M'Kay, Portnacon, who kindly lent it to me for exhibition, and who, I hope, will present it to the National Museum.

It is $2\frac{7}{8}$ inches in length and $1\frac{1}{8}$ in width at the cutting edge, which is slightly curved. It has a slight flange on each side. Immediately below the termination of the flanges the width is a little over half an inch, and widens again to $\frac{7}{8}$ inch near the upper end. The wings or flanges are not of equal size, and the larger is bent over so as to keep a better hold of the shaft. It weighs $2\frac{1}{2}$ oz., and is in a good state of preservation.

IV.

NOTICE OF A STONE, BEARING A ROMAN INSCRIPTION, BUILT INTO A STAIRCASE IN JEDBURGH ABBEY. BY J. COLLINGWOOD BRUCE, D.C.L., LL.D., HON. MEM. S.A. SCOT. COMMUNICATED BY THE MOST HON. THE MARQUIS OF LOTHIAN, PRESIDENT OF THE SOCIETY.

The stone which bears the following inscription forms the lintel over the entrance to the north turret stair at the west end of Jedburgh Abbey. The inscription is on the under side, and covers about half the stone, the lower portion of which is rougher than the inscribed part, and appears to have been buried in the earth. As will be seen from the following letter by Dr Collingwood Bruce, the stone appears to have originally formed part of a Roman altar:—

NEWCASTLE-ON-TYNE, *June 8, 1885.*

MY LORD,—Through your kindness, I have been supplied with a cast of a stone, bearing a Roman inscription, which has been built into a staircase of Jedburgh Abbey. You ask for my views as to the reading of the inscription, which I have great pleasure in giving you. (A representation of the inscription¹ is given in fig. 1.)

The stone no doubt forms the largest part of a Roman altar, but probably a portion of it has been removed by the masons of the abbey to fit it for its place in the structure. As represented by the cast, it measures 21 by 15 inches.

The letters are well formed, and though one or two of them have been purposely obliterated, and one or two others are slightly obscure, I have no doubt that the inscription has originally stood thus:—

IOM VEXI
LLATIO RETO
RVM GAESA
Q ' C ' A ' IVL
SEVER TRIB

¹ The Society is indebted to the Society of Antiquaries of Newcastle, through Dr Collingwood Bruce, for the use of the illustrations in this paper.

and may be thus expanded?—*Jovi optimo maximo, vexillatio Raetorum Gaesatorum quorum curam agit Julius Severinus tribunus*; and may be thus translated:—"To Jupiter the best and greatest the vexillation of Rhaetian spearmen under the command of Julius Severinus the tribune . . . [erected this]."

I believe a "vexillation" was a body of men selected from various cohorts or even legions for some special expedition, but all fighting under one common standard or *verillum*.

I need hardly say that *Raetorum* is a rustic spelling for *Rhaetorum*. It is interesting to find in Jedburgh at the present day traces of men



Fig. 1. Stone with Roman Inscription in Jedburgh Abbey (21 by 15 inches).

who in the infancy of our country's history had travelled all the way from Rhaetia, the country of the Grisons on the Alps, near the Hercynian forest.

The word *Gaesatorum* is somewhat peculiar and of rare occurrence. I have only met with it once before. The word *gaesum* seems to have been the name of a peculiarly formed javelin or spear. This weapon was at first only used by savage tribes, but it was eventually adopted by some Roman troops, who hence took the name of *Gæsati*. Wherein the peculiarity of this weapon consisted we have no means of knowing.

In the Roman station of *HABITANCUM*, the modern Risingham, in the

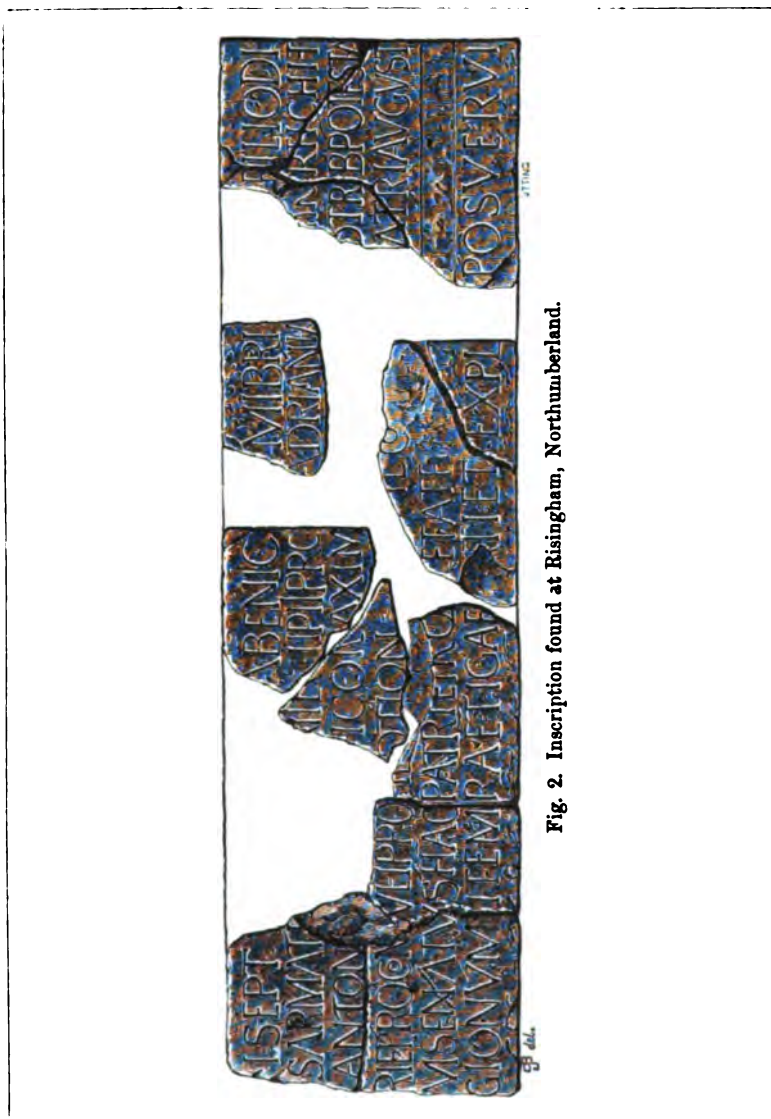


Fig. 2. Inscription found at Risingham, Northumberland.

north of Northumberland, we meet with a much fractured inscription (fig. 2) in which the *Racti Gaesati* are mentioned. The last line of the inscription is as follows :—

[COH I VAN]GIONVM ITEM RAETI GAESATI ET EXPL[ORATORES] . . .
POSVERVNT.

There can be little doubt that the *Racti Gaesati* on this Risingham stone are the same troops as carved the Jedburgh stone. Risingham is on the Watling Street, and a march of a comparatively few miles would bring them to the Jedburgh of the present day. The inscribed stone to which I here refer to is given and figured in the *Lapidarium Septentrionale*, No. 628. It is also given in the *Corpus Inscriptionum Latinarum*, vol. vii. No. 1002. The stone itself is preserved in the Museum of the Society of Antiquaries of Newcastle.

The letters Q, C, A in the fourth line are each followed by a leaf stop. When we moderns contract a word we put a full stop after it. Two other inscriptions have been found at Risingham with these letters upon them. I follow Professor Hübner of Berlin, one of the most learned of epigraphists, in reading them "*quorum curam agebat or agit.*"

There is one more stone from Risingham (fig. 3) now in the Museum at Newcastle, which throws light upon the Jedburgh inscription. It is an altar to *Fortuna Redux*—"Fortune which brings back in safety." It is figured in the *Lapidarium Septentrionale*, and is also given in the *Corpus Inscriptionum Latinarum*, vol. vii. No. 984. It reads thus :—

FORTVNAE REDVCI
IVLIVS SEVERINVS
TRIB. EXPLICITO ·
BALINEO · V · S · L · M.

"Julius Severinus the tribune erects this altar on the occasion of the completion of a bath to Fortune who brings back in safety, in discharge of a vow, most willingly, and to a most deserving object."

The value of this inscription on the present occasion is to give us the name in full of the tribune who dedicates to Jupiter the altar in the

walls of the Abbey of Jedburgh. I was disposed at first to read the name of the dedicator as Julius Severus; there can be no doubt, however, that the SEVER of the Jedburgh stone is but a contraction for the SEVERINVS of the Risingham stone.



Fig. 3. Roman Altar, from Risingham.

Probably a line or two of the Abbey stone is wanting. As the first cohort of Vangiones was quartered at *Habitancum*, Risingham, our

tribune Severinus may have, when on home duty, ranked as their commander. There may therefore have been in the last line of our inscription

COH · I · VANGIONVM

and perhaps also yet another bearing the letters

V · S · L · M

Votum solvit libens merito. These, however, are doubtful points.

I trust the explanation which I have ventured to give may on the whole be approved of. I have communicated my views to Professor Hübner, and I am glad to say he agrees with me.

I have the honour to be,

Yours faithfully,

J. COLLINGWOOD BRUCE.

To the Most Hon. the Marquis of Lothian,
President, Soc. Antiq. Scot.

MONDAY, 8th June 1885.

PROFESSOR NORMAN MACPHERSON, LL.D., Sheriff of Dumfries
and Galloway, in the Chair.

A Ballot having been taken, the following Gentleman was duly
elected a Fellow of the Society :—

THOMAS STEEDMAN, Clydesdale Bank, Kinross.

The following Donations to the Museum and Library were laid on the
table, and thanks voted to the Donors :—

(1) By ROBERT THOMSON, Architect, Glasgow, through JAMES
DALRYMPLE DUNCAN, F.S.A. Scot.

Cinerary Urn of clay, 13 $\frac{3}{4}$ inches in height, by 11 $\frac{1}{4}$ inches diameter
at the mouth, ornamented in the upper part with a band of raised
zigzags and bosses.

Cinerary Urn of clay, 12 $\frac{1}{2}$ inches in height, and 9 $\frac{1}{2}$ inches in diameter

at the mouth, ornamented with impressed lines and zigzags above the shoulder.

These urns were found at Uddingstone, in the parish of Bothwell, Lanarkshire. [See the subsequent communication by J. Dalrymple Duncan.]

(2) By Rev. JAMES RUSSELL, Minister of Walls and Flotta, Orkney.

Polished Celt of granite, adze-shaped, $2\frac{3}{4}$ inches in length, by $1\frac{1}{8}$ inches across the cutting face, found at Burnhouse, Longhope, Orkney.

(3) By Rev. C. J. COWAN, B.D., F.S.A. Scot., Minister of Morebattle, Kelso.

Fragments of a Bronze Sword, and a small Ring of Bronze, found in the glebe at Kelton, Kirkcudbrightshire.

The Rev. Mr Cowan has supplied the following notice of the circumstances in which they were found :—

“These fragments of a bronze leaf-shaped sword were found in March 1885, in the glebe of Kelton, near Castle-Douglas, some two feet below the surface. The sword appears to have been perfect, but was broken and otherwise injured by the workmen in removal; and, when search was subsequently made, the missing part, the point, could not be recovered. The fragments, when pieced together, measure just over 17 inches in length, with a greatest breadth of $1\frac{1}{8}$ inches. As apparently about a third of the blade is wanting, and as the cutting edge on both sides has been broken off, the sword may be described as of average size. The characteristic nick on the blade near the hilt can be plainly observed. There are nine rivet-holes, three in each of the wings, and three in the hilt-plate—one of the latter still containing the rivet, which is of bronze. A ring, also of bronze, was found beside the sword, of the furniture of which it may have formed a part. Its diameter is, internally, $\frac{7}{8}$ inches, and externally, $1\frac{3}{8}$ inches. The interest of this discovery chiefly depends on the rarity of such finds in the S.W. of Scotland. Although nearest to Ireland, where they are comparatively common, Galloway has hitherto yielded, so far as I am aware, but few swords

of this type. One of these, it may be noted, was found in Carlinwark Loch, which is within half a mile of the site of this discovery."

(4) By Major COLIN MACKENZIE, F.S.A. Scot.

Fragments of Cinerary Urn, Flint Scraper, and Nodule of Pyrites of Iron, from a cist at Flowerburn, Ross-shire. [See the subsequent communication by Major Mackenzie.]

Two portions of Sculptured Stones, from Rosemarkie, one showing a border of interlaced-work on the side and edge, the other bearing the figures of two ecclesiastics.

(5) By the Lady CONSTANCE CAMPBELL, through Dr MITCHELL.

Full-sized Drawings of a Hoard of five Bronze Swords, a Scabbard-end, and a Spear-head, found in Kintyre, and now preserved in Inveraray Castle.

(6) By the SOCIETY OF ANTIQUARIES, London.

Proceedings of the Society of Antiquaries, London. Vol. IX. Parts 1-3.

(7) By the CAMBRIAN ARCHÆOLOGICAL ASSOCIATION.

Archæologia Cambrensis, Journal of the Cambrian Archæological Association. Fifth Series. Nos. 2-5.

(8) By the NUMISMATIC SOCIETY.

The Numismatic Chronicle. Third Series. Nos. 14-17.

(9) By the BRITISH ARCHÆOLOGICAL ASSOCIATION.

The Journal of the British Archæological Association. Vol. XL. Parts 2-4, and Vol. XLI. Part 1.

(10) By the ARCHÆOLOGICAL INSTITUTE OF GREAT BRITAIN, &c.

The Archæological Journal. Vol. XLI. Parts 2-4, and Vol. XLII. Part 1.

- (11) By the SOCIETY OF ANTIQUARIES OF NEWCASTLE.
Archæologia Æliana. New Series. Vol. X. Parts 1-3.
- (12) By the ROYAL HISTORICAL AND ARCHÆOLOGICAL ASSOCIATION.
Journal of the Royal Historical and Archæological Association of Ireland. Vol. VI. Nos. 56-59.
- (13) By the ROYAL IRISH ACADEMY.
Proceedings of the Royal Irish Academy. Series II., Vol. II. No. 5 ;
Vol. IV. Nos. 1 and 2. Transactions, Vol. XXVIII. Nos. 15, 16.
- (14) By the ROYAL SOCIETY OF NORTHERN ANTIQUARIES, Copenhagen.
Aarboger for Nordisk Oldkindighed, 1884, Parts 2-4, and 1885, Part 1.
Memoires de la Societé Royale des Antiquaires du Nord, 1884 and 1885, Part 1.
- (15) By the SMITHSONIAN INSTITUTION.
Second Annual Report of the Bureau of Ethnology, 1880-81.
- (16) By ALEX. MALCOLM SCOTT, F.S.A. Scot., the Author.
The Battle of Langside, 1568. 4to. 1885.

The following Articles, acquired by the Purchase Committee during the present Session, from 29th November 1884 to 8th June 1885, were exhibited to the meeting, viz. :—

1. Axe-head of diorite, $8\frac{1}{2}$ inches in length, by $2\frac{1}{4}$ inches across the cutting face, oval in the cross section in the middle of its length, and tapering to a conically pointed butt. It is peculiar in having one of its faces flattened to an adze-shaped form, while the other presents the rounded curves of the common form of stone axe. It is said to have been found in the neighbourhood of Monkton House, Mid-Lothian.

String of forty Beads of a green vitreous paste, with intercrossing bands of yellow, red, and black.

2. Highland Flint-lock Pistol of steel, by John Murdoch (Doune), with scroll-ended butt, the barrel fluted, and stock and barrel both finely engraved.

Highland Flint-lock Pistol of steel by Alexander Murdoch (Doune), with globose butt, the barrel plain, the lock engraved, and the stock inlaid with scroll-work in silver.

3. Polished Celt of a greenish mottled quartz or jasper, $2\frac{3}{4}$ inches in length, by $1\frac{3}{4}$ inches across the cutting face, greatest thickness not exceeding $\frac{3}{4}$ inch, somewhat triangular in shape, and flatter on one face than the other. It is said to have been found in the neighbourhood of Penicuik.

Polished Celt of granite, 4 inches in length, by $2\frac{1}{2}$ inches across the cutting face, which lies obliquely to the axis of the implement, the sides ground flat, and tapering to a narrow, thin, and rounded butt. It is said to have been found at Carlops, Mid-Lothian.

4. Polished Celt of felstone, $5\frac{1}{2}$ inches in length, by $2\frac{1}{2}$ inches across the cutting face, the sides ground flat, the butt rounded and slightly chipped, from Kirkcowan, Wigtownshire.

5. Polished Celt of basalt, $3\frac{3}{4}$ inches in length, by $1\frac{1}{2}$ inches in breadth across the cutting face, found in Fifeshire.

Polished Celt of basalt, $3\frac{1}{2}$ inches in length, by $2\frac{1}{4}$ inches in breadth across the cutting face, found in Fifeshire.

Polished Celt of flinty slate, $3\frac{1}{2}$ inches in length, by 2 inches in breadth across the cutting face, found near Auchtermuchty, Fife.

Polished Celt of porphyry, adze-shaped in form, $3\frac{3}{4}$ inches in length, by $1\frac{3}{4}$ inches in breadth across the cutting face, found in Fifeshire.

Arrow-head of flint, with barbs and stem, found in Fifeshire.

Snuff-Box, being a section of walrus-tooth, roughly made, and bound with tin.

6. Digging Stone, from Caffraria, being a globular mass of sandstone, $3\frac{1}{2}$ inches diameter, with a hole 2 inches wide, bored through the centre. These stones are used for weighting the "digging stick," with which the natives of South Africa dig for edible roots.

7. Flat Celt of bronze, $5\frac{3}{4}$ inches in length.

Flanged Celt of bronze, $4\frac{3}{4}$ inches in length, with slight flanges and

stop-ridge, the blade widely expanding, the flanged part nearly of uniform width, or about an inch in the middle, the butt crushed down by recent hammering.

Flanged Celt of bronze, $5\frac{1}{4}$ inches in length, 2 inches in greatest breadth across the cutting face, the flanges bent over and peaked, the stop-ridge more prominent on one side than the other, and the whole surface roughened.

These three Celts are stated to have been found somewhere in the west of Scotland, the precise locality being unknown.

8. Collection of rude Stone Implements, from Leenow, Tenston, parish of Sandwick, Orkney, about 250 in number, including some very large examples of the oblong, oval, and club-shaped implements.

9. Reproduction of the largest known example of the "double cup-shaped Fibula" of gold, found in 1819 at Castle Kelly, county of Roscommon, Ireland, and now preserved in the Museum of the Royal Irish Academy. It measures $3\frac{3}{8}$ inches in height, and the cup-shaped discs are 5 inches in diameter and $1\frac{5}{8}$ inches deep, while the bow-shaped part that unites them is $4\frac{1}{8}$ inches in circumference at the thickest part. The original weighs 16 oz. 17 dwt. 4 gra. of pure gold.

10. Urn of steatite, oval in shape and flat-bottomed, measuring $12\frac{1}{4}$ inches by $10\frac{1}{2}$ inches at the mouth, and $8\frac{1}{2}$ inches high, and containing burnt bones.

Urn of steatite, measuring 8 inches by $5\frac{1}{4}$ inches at the mouth, and $4\frac{3}{4}$ inches high, rather rudely made.

Urn of steatite, measuring $6\frac{3}{4}$ inches by $6\frac{1}{2}$ inches at the mouth and 4 inches high, also rudely made.

These three urns were found in a cairn on the summit of the highest hill in the island of Uyea, Unst, Shetland. The stones of the cairn were removed for building purposes, and the urns were found subsequently, about two feet below the original surface of the soil, and covered with rough flag-stones. Each urn contained burnt bones.

11. Oblong Knife of dark-coloured porphyry, $6\frac{1}{4}$ by $4\frac{1}{2}$ inches, nowhere exceeding $\frac{3}{8}$ inches in thickness, the back and sides nearly straight, the face rounded and sharp, but somewhat broken.

Oblong Knife of dark-coloured porphyry, $5\frac{1}{4}$ by $4\frac{1}{8}$ inches, nowhere

exceeding $\frac{1}{2}$ inch in thickness, the back and one side nearly straight, the other two sides curved, and sharpened to an edge.

Oblong Knife of dark-coloured porphyry, 6 by $3\frac{3}{8}$ inches, nowhere exceeding $\frac{3}{8}$ inches in thickness, the back and one of the sides nearly straight, the other two sides curved, and sharpened to an edge.

Oblong Knife of dark-coloured porphyry, $4\frac{3}{8}$ by $2\frac{1}{4}$ inches, and nowhere exceeding $\frac{3}{8}$ inches in thickness, the back nearly straight, the sides rounded, and the face also rounded and sharpened to a cutting edge.

These four knives of porphyry, which are of a type peculiar to the Shetland Isles, were found together in a bog in the island of Uyea, Unst, Shetland.

12. Collection of Urns, Flint Implements, &c., comprising the whole contents of a chambered cairn at Unstan, in the Loch of Stennis, Orkney. [See the subsequent communication by Mr R. S. Clouston.]

13. Harp-shaped Fibula of silver, closely resembling that found in the crannog at Lochlee, and figured in the *Proceedings* (new series, vol. i. p. 231, fig. 99). It is stated to have been found in Ayrshire, the precise locality being unknown.

14. Penannular Brooch of silver, with interlaced ornamentation, from Ridgemount, King's County, Ireland.

15. Old Highland Brooch of silver, with engraved ornamentation and niello-work of the usual patterns. This brooch is remarkable for its great weight and thickness.

16. Four small Highland Brooches of copper, probably made out of copper pennies, and a Meal-Sieve, from North Uist.

17. Polished Adze-head of flinty-slate, oval in shape, $5\frac{3}{4}$ inches in length, $2\frac{5}{8}$ inches in breadth, and not exceeding $\frac{5}{8}$ inch in greatest thickness, from New Guinea.

18. Fourteen Collections of Flint Implements, &c., from Culbin and Findhorn Sands, amounting to about 2000 specimens.

19. Papworth's Ordinary of British Armorial. Imp. 8vo. 1874.

20. Selections from the Charters of the Burgh of Stirling. 4to. 1884.

21. Twenty-two Photographs of pages of Celtic MSS.

22. Twenty one Roman Imperial Bronze Coins; one Testoon of Mary of Scotland; one Farthing of Alexander III. of Scotland.

23. Laing's *Select Remains of the Ancient Popular and Romance Poetry of Scotland*. Edited by John Small, M.A. 4to. 1885.

24. Dickson's *Introduction of the Art of Printing into Scotland*. 8vo. 1885.

There were also exhibited—

(1) By His Grace The DUKE OF ATHOLE, K.T.

Two finely ornamented Urns (fig. 1) of the low, thick-lipped form, usually deposited with unburnt bodies, and to which the name "food-vessel" has been commonly applied. Both are nearly of the same shape, with a slightly contracted neck above the shoulder and a slightly everted rim. Underneath the shoulder the larger vessel is surrounded



Fig. 1. Urns found in a cist at Kincaigie, Little Dunkeld ($5\frac{1}{2}$ and $3\frac{1}{2}$ inches in height).

by six projections placed at equal distances round the circumference. In the smaller vessel the number of these projections is eight, but they do not seem to have been pierced with holes, as has sometimes been observed in other cases. They are both highly ornamented with horizontal bands of linear ornamentation impressed in the soft clay by a twisted cord or by a comb-like tool. In the larger vessel the ornament takes the form of short oblique lines, and in the smaller vessel it takes the form of lines encompassing the circumference. The larger vessel measures $5\frac{1}{2}$ inches in height, and $6\frac{1}{2}$ inches in diameter across the

mouth; the smaller measures $3\frac{3}{8}$ inches in height, and $3\frac{1}{2}$ inches diameter across the mouth. They are preserved at Blair Castle.

The circumstances in which the urns were found have been communicated to the Secretary as follows:—

BLAIR CASTLE, BLAIR ATHOLE, 4th May 1885.

DEAR SIR,—The two urns I left with you on the 2nd were found in a cist on the farm of Kincraigie, parish of Little Dunkeld, Perthshire. The cist was discovered on 10th April this year by a man ploughing. The minister of Logierait ordered it to be covered up till my orders were received. I accordingly visited the spot on 13th April, when we cleared out the cist. It was situated on a dryish knoll in the middle of a ploughed field, and lay from N.W. to S.E., the wider end being toward the N.W. Its dimensions were as follows:—Length 4 feet, breadth at one end 15 inches, at the other end 10 inches, depth 15 inches. The cist had evidently been previously discovered and disturbed, as the pieces of the urns were discovered in various parts of the cavity. It was filled up with earth.—I am, yours faithfully, ATHOLE.

(2) By the Right Hon. Lord NAPIER AND ETTRICK, K.T.

Sculptured Stone (fig. 2) from Over-Kirkhope, in Ettrick, being an oblong naturally-shaped slab of close-grained sandstone, 4 feet in length, 13 inches in greatest breadth, and about $4\frac{1}{2}$ inches in thickness, bearing on the upper part the figure of a man rudely incised. The figure is represented with upraised hands, suggestive of the ancient attitude of prayer, as in early Christian sculptures, and more particularly on the belt-clasps from Burgundian graves, which commonly show this attitude rendered with almost equal rudeness. (“*Bracelets et Agrafes Antiques*,” par F. Troyon, in the *Mittheilungen der Antiquarischen Gesellschaft in Zurich*, vol. i.) The head of the figure is very large in proportion to the body; the dress consists of a tunic, and the feet are bare. An equal-armed cross is incised upon the breast, and on each side there is a circle with a central depression. Above the head on the right side is a small rectangular space bordered by an incised line, with the letters P P in the centre. The top of the stone is hollowed into an oblong cavity 7 inches in length, 2 inches in width, and about an inch in depth. The lines of the figure are picked out with a pointed tool, those of the letters and bordering are cut by a driving chisel.



Fig. 2. Sculptured Stone from Over-Kirkhope, in Ettrick (4 feet in length).

(3) By the Right Hon. The EARL OF STAIR, K.T., F.S.A. Scot.

Polished Celt of serpentine, $12\frac{3}{4}$ inches in length, by 4 inches across the cutting face, the edges ground flat, the butt shaped like the cutting edge, but not sharpened, found at Kirkcolm, Wigtownshire.

Wedge-shaped Stone Hammer of Silurian sandstone, $8\frac{1}{2}$ inches in length, $3\frac{1}{2}$ inches in greatest breadth, and $2\frac{1}{2}$ inches in thickness, perforated at a distance of 2 inches from the wide end by a hole for the handle $1\frac{1}{2}$ inches in diameter.

(4) By Dr JOHN DOUGLAS, Whithorn, through Rev. GEORGE WILSON, Glenluce, Corr. Mem. S.A. Scot.

Stone, 17 inches in length by 7 inches in breadth and 5 inches in thickness, bearing on its weathered face the incised figures of a man with a crook in his hand, an animal (dog?), and a figure consisting of a double-disc with two connecting lines, somewhat suggestive of the form of the so-called "spectacle-ornament," or double-disc symbol of the sculptured stones of Scotland. The figure of the man measures $3\frac{1}{2}$ inches, and that of the double-disc over his head 2 inches in length. Beside them is also incised the word "William" and the date 1768. The stone is apparently broken off from a larger block or from an outcrop of rock.

The following Communications were read:—

I.

NOTE REGARDING CINERARY URNS RECENTLY DISCOVERED AT UDDINGSTON. BY J. DALRYMPLE DUNCAN, F.S.A. SCOT., HONORARY SECRETARY, GLASGOW ARCHÆOLOGICAL SOCIETY.

The circumstances attending the discovery of the urns now exhibited may be very shortly stated.

On Wednesday, 25th March last, while some workmen were excavating the ground preparatory to the construction of a road in front of a row of cottages recently erected at Kylepark, Uddingston, they discovered two urns embedded in the gravel at a depth of about 1 foot from the surface of the field. There was no trace of any enclosing cist, and both urns, in accordance with a not unusual practice, had been merely placed in the earth mouth downwards over the bones they were intended to protect.

The fact of their discovery was reported to me next day, and on Saturday the 28th I proceeded to Uddingston. By this time the urn first found had been got out comparatively uninjured, although unfortunately the workman who discovered it had sent his pickaxe through its bottom before he realised what it was. The other, and by far the finer in the character of its ornamentation, as ill-luck would have it, lay under one of the lines of rails of a tramway used for conveying the building material, and had been broken to fragments by the heavy weights passing over it. We collected the pieces as well as we could, and I am informed by Dr Anderson that he believes it will be quite possible to put them together again.

Subsequent to the discovery of the urns, and about 3 yards from the place where they were found, the workmen had come on a quantity of bones. With the assistance of a couple of men whom Mr Thomson, the proprietor of the field, kindly put at my service, I had the ground dug up for a considerable space round the spot, when after some search we were successful in discovering a few small portions of a third urn.

The urns are of the large cinerary class, and are, as usual, formed of coarse clay paste mixed with minute fragments of stone.

The unbroken urn (fig. 1) stands a little over 12 inches in height, with a diameter across the mouth of $9\frac{1}{2}$ inches. The ornamentation on it is almost wholly found above the shoulder, and consists of two horizontal double lines of indented markings, as of a twisted cord. The lines are $2\frac{1}{2}$ inches apart, and between them run zigzag lines similarly formed. The lower portion of the urn is flowerpot-shaped and plain.



Fig. 1. Urn found at Uddingston (12 inches in height).

The double line of indented markings running just below the shoulder is uncommon. Round the inside of the lip run two double lines of indented markings parallel to each other, and nearly an inch apart.

The second urn (fig. 2), which is now reconstructed, and measures $13\frac{1}{2}$ inches in height, is characterised by much more elaborate ornamentation, consisting of strongly-marked moulded lines running zigzag, with bosses in the angles. The mouldings are enriched by a double row of indented markings on each side, and the inside of the lip has two rows of holes (each about $1\frac{1}{2}$ inches from the other) running round it, with a

clearly-marked dividing line between them. The bosses have evidently been moulded on the urn from the exterior.

The trifling portions of the third urn, which have been preserved, do not enable us to judge with any certainty as to its size or character. Its ornamentation, however, seems to have consisted of lines of indented markings.

The field in which the urns were found is bordered by the Clyde, and



Fig. 2. Urn found at Uddingston ($13\frac{1}{2}$ inches in height).

the particular spot where they were discovered is about 70 yards from the bank of the stream. The soil is of a specially dry and gravelly nature, and Mr Thomson informs me that this characteristic distinguishes it and a field immediately opposite on the other side of the river from the adjacent lands, which are boulder clay. The line of demarcation is, I understand, very clearly marked.

The field has been regularly ploughed, and it is somewhat remarkable,

in view of the inconsiderable depth at which the urns were found, that they should have remained so long undiscovered, and should have received no injury from the plough and the feet of the horses passing over them.

I have had the bones which were found with the urns examined by Professor Young of Glasgow University and Professor Buchanan of Anderson's College, but they both report that they are unable to say anything definite as to the number of persons represented in the remains, or as to their age and sex. Professor Buchanan says he is able to distinguish portions of the bones of the fore-arm, and would infer from their small size that the person to whom they belonged was comparatively young—about seventeen probably. Professor Young recognises a clavicle, which he says must have belonged to a man of no great stature—about 5 feet 6 inches probably. A portion of a jaw-bone in all likelihood belonged to a person of about 4 feet 8 inches. They both agree that parts of the skeletons of at least two persons, one full-grown and the other comparatively young, are present, but inextricably mixed together.

The group of urns found at Uddingston forms evidently a specimen of the small local cemeteries of the Bronze period described by Dr Anderson in the *Proceedings of the Society* for 1879, and the discovery is specially interesting from the fact that it is the first instance, so far as I am aware, of one of these having been brought to light in the immediate neighbourhood of Glasgow.

II.

NOTICE OF THE EXCAVATION OF A CHAMBERED CAIRN OF THE
STONE AGE, AT UNSTAN, IN THE LOCH OF STENNIS, ORKNEY.
By ROBERT STEWART CLOUSTON.

The "knowe of Unstan" is situated in a piece of land jutting into the Loch of Stennis, a few hundred yards to the north-east of the Bridge of Waithe. It is in the property of Mr William Leith, who courteously gave me permission to open it in July 1884.

To the north of the knowe, and within about 20 yards of it, the cape in which it stands is traversed by a moat from shore to shore. This moat, at a point nearly opposite the knowe, is crossed by a narrow passage of filled-in earth.

The knowe, prior to excavation, presented the same appearance as the usual Orkney tumulus, having an unbroken slope to the ground. This, however, is due to the slipping down of the stones of which the cairn is composed, as there is an external wall surrounding the whole structure, which, in the parts where we found it tolerably entire, was some feet in height, and built of larger stones than those used in the interior.

On the top of the knowe there was a considerable depression, giving it very much the appearance of a previously opened tumulus; but I have no doubt this was occasioned by the falling in of the roof, more especially as I was assured that the depression had become sensibly deeper of recent years.

Digging was begun in the east side of the knowe, as there appeared to be a slight sink in the formation of the cairn at this part. A few feet brought us to several large stones, some placed edgewise, others laid flat. These we found to be the roofing of the passage by which the interior is entered.

Its direction by compass is a little to the north of east, this being as nearly as possible in the opposite direction from Maeshowe.

At the inner end of the passage, and built partly over the last of the roofing stones, were two walls composed of small stones, converging to a space of 14 inches apart, and resembling very much, as my workman

remarked, the bow of a ship. Before the excavation of the passage could be completed, I was reluctantly compelled to remove the whole of one of these walls and part of the other.

The passage has no door stone, as in Maeshowe, and the roofing only extended 11 feet from the interior. Below the last roofing stone is a downward step of about a foot to the level of the interior. The step is formed by one large stone laid across, the outside being rudely built up to its level. In the passage were found a flint scraper and a barbed arrow-head, also some fragments of pottery. The passage leads into a large chamber 21 feet long, and averaging about 5 feet broad. This is subdivided by large flagstones into five compartments, off the middle one of which is a small side chamber. These compartments of the chamber will be referred to in their numerical order, counting from the southern to the northern end of the chamber, or from left to right in the plan. The passage does not enter into the central or third compartment, but into the second from the south, the distance from the south-east corner to the middle of the passage being exactly one-third of the entire length of the wall.

The first compartment of the chamber, which lies to the south side of the entrance, varies from 4 feet 9 inches in length in its east wall, to 4 feet 1 inch in its west. The width of the end wall is 4 feet 9 inches, gradually widening to 5 feet 6 inches, where the flagstones divide it from the second compartment into which the entrance-passages opens. The end wall is formed below of one large flagstone, with building above it. This is also the case in the fifth compartment at the opposite end of the chamber, as well as in the small side chamber.

The opening into the first compartment from the second (which lies to the north of it) between the wall-fast slabs projecting across the floor is slightly over 2 feet in width at the base of the flagstones. Across this opening, and in the inside of the compartment, is a stone 1 foot high and 2 feet $9\frac{1}{2}$ inches long, laid edgewise. Level with this a line of stones, also set edgewise, runs from it to the south wall, subdividing the compartment into two nearly equal parts, the space to the east being rudely paved at a level of about 6 inches above the other, which, like the rest of the chamber, was floored with white clay. About 3 feet

4 inches above the clay floor are five small stones, about the size of a man's hand, jutting out from the wall. In this first compartment were found a considerable quantity of bones, partly human, a curious black substance which appears to me to be a mixture of peat and charcoal, the bottom of a small flat-bottomed urn, and some other fragments of pottery. This compartment was much freer of soil than any of the others, most of it being more easily cleared by the hand than the pick.

The side walls of the second compartment are 4 feet 8 inches in length, but the dividing flagstones, not having been set square, give it a minimum length of 4 feet 3 inches. The distance from side wall to side wall varies from 6 feet 3 inches to 5 feet 6 inches.

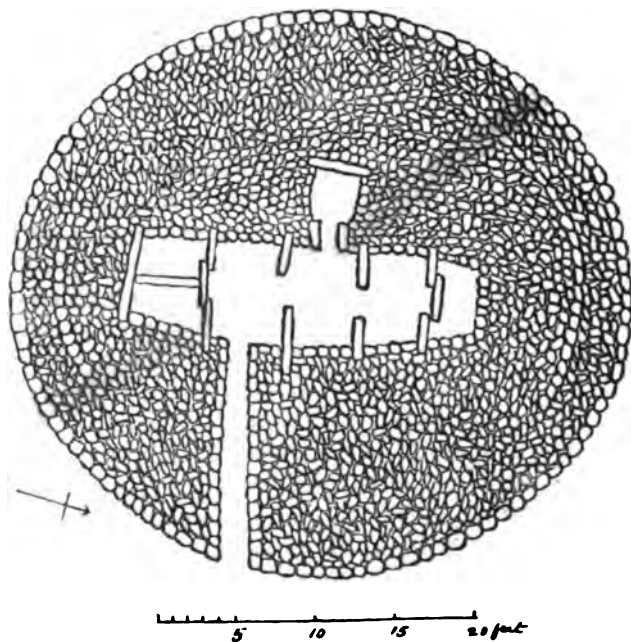


Fig. 1. Ground Plan of Chambered Cairn at Unstan.

The whole structure, indeed (as will be seen from the ground-plan, fig. 1), is irregular in shape, none of the walls being quite straight, and

the wall at one side of the dividing flagstone rarely coinciding with that on the other. At the side of the S.W. flagstone in this compartment there was a small space, not covered with white clay, and in this we found several fragments of different urns. A more striking instance of how the relics must have been scattered is the fact of a piece of pottery, found in the fourth compartment, fitting into an urn, the rest of which was dug up in this second compartment of the chamber. By far the greater portion of the relics found in the chamber were in this compartment. Overlying its clay floor was a stratum of black ash or earthy matter, largely composed of charcoal, in which great quantities of pottery, and several flint chips and flakes were found.

In the Caithness chambered cairns excavated by Dr Anderson, the burials were of two classes, viz., *in* the floor, burnt; and *on* the floor, unburnt.

Several fragments of bones were found in the floor of this compartment, but none which showed any trace of burning. Curiously enough, however, the flints present indubitable indications of the action of fire. Upon the black stratum there were laid several burials in the contracted posture, as in the Caithness cairns.

The third compartment of the chamber, lying to the north of that which is entered by the passage, varies from 5 feet 8 inches to 6 feet $1\frac{1}{2}$ inches in measurement from east to west, and averages a trifle over 4 feet in length from north to south. The black stratum which covered the floor of the second compartment extended a couple of feet or so into this compartment, and also into the first compartment and the passage. A large quantity of bones were found in this third compartment, among which, close to the door of the side chamber, opening off it, there were several large vertebræ. A flint implement, $3\frac{1}{2}$ inches long, of the class styled by Mr Evans as "fabricators or flaking tools," was the only relic discovered here, with the exception of a few fragments of pottery.

The side chamber opens off the third compartment on its west side. The door is formed of two large upright stones, thus making a short passage. Unlike the rest of the building, with the exception of the passage, the roof here is entire, its height being 3 feet $6\frac{1}{2}$ inches. A

rude floor is made by a flagstone, small enough to have been introduced after the chamber was completed, and supported on blocks of stone.

There were two distinct burials here, in the contracted posture, one of the skulls being the most complete of any of those found, though scarcely half remained. A tooth, which has been pronounced by Dr Garson to be that of a small dog, was found near the door. A stone pounder lay under the bones of one of the skeletons, and this, with two flakes, comprised the whole of the relics found.

The fourth compartment measures 5 feet 7½ inches from east to west and about 4 feet from door to door. Only a few fragments of pottery and a quantity of bones were found here. On the east side there seems to have been a rude pavement of the same kind as in the first compartment.

The fifth compartment, at the northern extremity of the chamber, is the smallest of the chambers. It measures only 3 feet from the door to the end wall, and the sides taper northwards to 3 feet 9 inches. This compartment, as has already been stated, resembles that at the other end of the chamber, in having a stone placed across the door, and an end wall composed partly of one flagstone. It has also stones jutting out from the wall at a height of about 4 feet above the clay floor. Large stones were laid on the floor, which may have been covered, as in the side chamber, with a flagstone; but, if so, it was too much broken to be recognised. A small and rudely formed arrow-head was found here. Some burials, and several small fragments of pottery, were also found; also, at a higher level than any other relic, a small piece of ornamented pottery of different pattern from all the others.

[Referring to the fragments of pottery found in the chamber of the cairn of Unstan, Dr Anderson stated that having carefully examined the whole of them, it appears that the total number of different vessels they represented must be somewhere about thirty. Of these, however, only six or eight have been found capable of reconstruction, so as to show their complete form and the character of their ornamentation.

The largest urn (fig. 2) is of reddish clay, softer and more porous than the rest, and thicker in the body. It is a large shallow round-

bottomed vessel, measuring $15\frac{1}{2}$ inches in diameter and $5\frac{1}{2}$ inches in depth in the centre. Under the broad flat lip, which measures $1\frac{1}{4}$



Fig. 2. Urn from the Chambered Cairn of Unstan, Orkney ($15\frac{1}{2}$ inches in diameter).

inches across, there is a slightly curved rim ornamented with scorings of oblique lines. In the form of the vessel there are thus three distinct parts—the round bottom, the upright brim, and the flat but slightly bevelled and everted lip. The ornamentation is confined to the upright brim of the vessel.

The next largest urn (fig. 3) is 14 inches in diameter and 5 inches deep in the centre. It is well-modelled and neatly made—almost as evenly turned as if it had been thrown on the wheel. The paste of



Fig. 3. Urn from Chamber of Unstan Cairn (14 inches diameter).

which it is composed is dark-coloured, hard-baked, and **free from** admixture of stones. The rounded under part of the **vessel** is thin, the

upright rim slightly thicker, and the lip, which is bevelled from the inside outwards, expands to $\frac{3}{4}$ inch in thickness. There is no ornament on any portion of the vessel except the vertical rim, which is $2\frac{1}{2}$ inches high, and scored obliquely to right or to left in alternate triangular spaces. Another urn, almost exactly similar in form and character (fig. 4) is $13\frac{1}{2}$ inches diameter and $4\frac{1}{4}$ inches deep in the centre. It is not circular, but slightly oval; and the vertical rim, which



Fig. 4. Urn from Chamber of Unstan Cairn ($13\frac{1}{2}$ inches diameter).

is only 2 inches high, has its lip almost flat, and $\frac{5}{8}$ inch in thickness. The ornamentation on the vertical rim of this vessel has the scorings of each alternate triangular space parallel to the lip of the vessel, while the others are placed obliquely to the left. Another urn of the same character (fig. 5) is $11\frac{3}{4}$ inches in diameter and $4\frac{1}{4}$ inches deep in the centre,



Fig. 5. Urn from Chamber of Unstan Cairn ($11\frac{3}{4}$ inches diameter).



Fig. 6. Urn from Chamber of Unstan Cairn ($9\frac{1}{4}$ inches diameter).

the lip flat, and $\frac{5}{8}$ inch in thickness, the vertical rim $2\frac{1}{4}$ inches high, ornamented like the first, except that it has two horizontal lines carried round under the brim. A fourth urn of the same character, but smaller (fig. 6), measures $9\frac{1}{4}$ inches diameter and $3\frac{1}{4}$ inches deep in the centre,

the lip flat and $\frac{1}{2}$ inch in thickness, the vertical rim $1\frac{1}{2}$ inch high, and ornamented as the first, but with triangular spaces of longer base. The rims of two other urns (figs. 7 and 8) of $10\frac{3}{4}$ and $10\frac{1}{2}$ inches



Figs. 7, 8. Rims of Urns from Unstan Cairn ($10\frac{3}{4}$ and $10\frac{1}{2}$ inches diameter).

diameter, are extremely thin, and both ornamented with triangular spaces similar to the second urn. A distinct variety of this form, with the rim



Figs. 9, 10. Fragments of Urns, from Unstan Cairn.

slanting outwards, is indicated by several fragments (figs. 9 and 10), with somewhat similar ornamentation. A perfectly plain vessel of



Fig. 11. Urn from Cairn of Unstan (9 inches diameter).

oval shape (fig. 11) measures 9 inches in its greatest diameter across the mouth, and 4 inches deep, the sides bulging considerably, and then contracting to the rounded bottom. Another form of plain unornamented urn, indicated by several fragments, seems to have had deep and almost straight sides, and a rounded bottom. These appear to have

been tall, can-shaped vessels, but as none show more than a small portion of one side, with an indication of curvature at the bottom, their

precise form and proportion has not been ascertained. One flat bottom only was found, about $3\frac{1}{2}$ inches diameter, but the upper part of the vessel has not been recovered. The prevailing type is therefore that of a round-bottomed vessel of a hard dark-coloured paste, with vertical brim, and thick flat or bevelled lip. In the Chambered Cairns of Caithness,¹ the round-bottomed form of urn, made of a thin, hard, dark-coloured paste, was also the prevailing form. The Chambered Cairns of Argyle had likewise yielded to the researches of Canon Greenwell a round-bottomed form of urn, of which the example (fig. 12), from the cairn at Largie,² will show the resemblance to the



Fig. 12. Urn from Largie Cairn ($12\frac{1}{2}$ inches diameter).

Orkney vessels. In the cairn at Achnacree, Argyleshire,³ Dr R. Angus Smith also found several round-bottomed urns, which are now in the Museum.

The stone implements found in the Unstan cairn, with the single exception of a "pounder," or oblong pebble of sandstone, were all of flint, and their calcined condition indicates that they must have passed through the fire. They form a very interesting and suggestive group. There are four leaf-shaped arrow-heads (two of which are shown in fig. 13), and one with barbs and stem. The leaf-shaped arrow-heads are of large size and well made, the shape inclining to the elongated

¹ *Proceedings*, vol. vi. p. 442, and vol. vii. p. 480.

² *Ibid.*, vol. vi. p. 341.

³ *Ibid.*, vol. ix. p. 415.

lozenge with curvilinear butt. The fifth arrow-head, which is barbed, is of smaller size, and has suffered damage, but not to such an extent as to

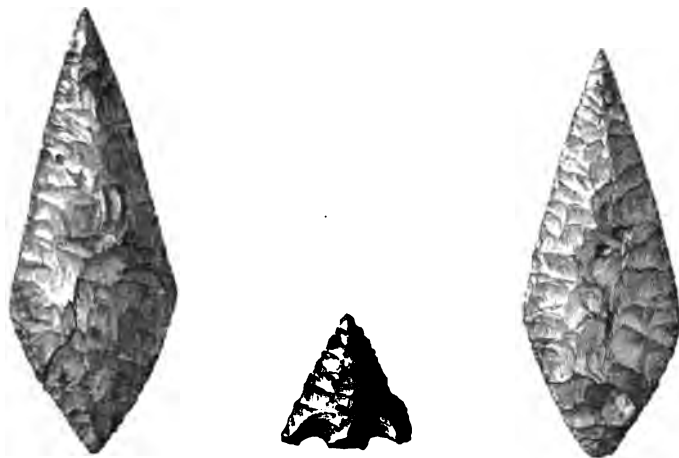


Fig. 13. Flint Arrow-heads, from Unstan Cairn (actual size).

obliterate its distinctive form. There was also found a finely-finished scraper (fig. 14) of a form which is not at all common in Scotland,



Figs. 14, 15. Scraper and Knife of Flint, from Unstan Cairn (actual size).

with both sides as well as the front bevelled to a cutting or scraping edge; and one of those rare implements of flint (fig. 15), an elongated

knife, with the edge ground smooth instead of being merely chipped. Such ground-edged knives have also been found in the chambered cairns of Caithness. Another flint tool, found in the chamber of the Unstan cairn, however, is of exceptional interest, inasmuch as it is the first recorded instance of its occurrence in connection with sepulture in Scotland. It is formed of a long ridged flake, nearly triangular in the cross section, and greatly worn by use at both extremities. It belongs to the class of implements styled by Mr Evans "fabricators," or flaking tools, and its use is presumed to have been that of a tool employed in the fabrication of arrow-heads and other implements of flint.

The bones found in the chamber have been submitted to Dr J. G. Garson, Royal College of Surgeons of England. In anticipation of a more detailed report from Dr Garson, it may be sufficient to state at present, that along with the fragmentary remains of several human skeletons, he recognises the presence of a large quantity of animal bones, among which he has identified those of the horse, ox, sheep, swine and dog. There are also numerous remains of birds, some of which have been of considerable size.]



Fig. 16. Flaking Tool of Flint, from Unstan Cairn (actual size).

III.

NOTICE OF A CIST, WITH AN URN AND STRIKE-LIGHT OF FLINT AND PYRITES, AT FLOWERBURN, ROSS-SHIRE. BY MAJOR COLIN MACKENZIE, F.S.A. Scot.

On the 7th of November 1883, while staying at Flowerburn House, in the Black Isle, Ross-shire, I heard that when trenching a piece of waste ground during the previous spring, a small cist had been discovered, and that it lay almost exactly at the spot where an urn had been previously dug up. This urn had been destroyed by its careless finders, and only the bottom of it had been preserved, and given to me some two years before. I was informed that a large stone happening to come in contact with the plough, it had been determined to remove it, when it was found to form the capstone of a small cist. After a rough examination, the cist was filled in again, having been found by the labourers employed to contain nothing but decayed bones.

On the morning of the 8th, accompanied by the keeper, I proceeded in search of the cist. I first examined the capstone, which lay near the edge of a small wood bordering one side of the field in which the cist was situated. It was a rude whin boulder, somewhat in the shape of an irregular rhomb, the edges and angularities being smooth and rounded through weather-wearing. Its extreme superficial measurement was 2 feet by 1 foot 10 inches, its thickness being about 8 inches.

I then sent for the tenant of the ground, to point out the spot where the cist itself was situated. He pointed to a small hollow lying on one side of what seemed to be a natural mound, and here two or three strokes of the pick succeeded in finding a resisting mass a little way below the surface. Its position was upon an inclined surface, and, through the scanty soil, the rock occasionally cropped out. On the N. and W. sides the declivity of the mound was gentle, running into the upper portion of the slope of the ground, while on the E., and particularly on the S. (where the road had been cut through the edge of it), it was more abrupt. The highest point of the mound was the highest

point in that part of the field. The measurements which I took showed the shorter axis of the mound, E.N.E. by W.S.W., to be 109 feet, and the longer, N.N.W. by S.S.E., to be 119 feet. The centre of the cist about to be described lay nearly W.S.W. of the highest point of the mound, distant about 20 feet. The mound had at one time borne a small natural plantation of birch and fir, but judging by the remains and the poorness of the soil, the trees must have been of but small size, sharing the scanty nourishment obtainable with whins and junipers.

Having succeeded in finding the site of the cist, we began with great care to remove the superincumbent earth. This was in no part very deep. Upon the natural trap rock rested about 3 feet of hard yellow sand, and above that another foot or so of black mould, giving a total depth of 4 feet. We first removed the soil from an area of some 8 feet square. We found the resistance we had encountered to be caused by a number of small whin boulders, mixed with small slabs of red sandstone from 6 inches to 1 foot in length, 4 inches to 6 inches in width, and 1 inch to $1\frac{1}{2}$ inches in thickness. The sandstone is natural to the district, the weather-worn whinstones, which are turned up in all directions in the fields, seem to have been carried thither by glacial or other action. The stones in question had formed the top course of the cist, which had been built like a sunk fence, the interstices being filled in with small stones and hard sand. In removing the capstone previously, this course had been destroyed by the labourers, and, when it was determined to shut up the cist, these stones had been merely heaped on the top and covered over. We carefully lifted out the stones, and uncovered the second course of the cist. The interior was found to be pear-shaped, its longest axis E. by W. being 1 foot 10 inches, and its shortest N. by S., 1 foot 6 inches. It was well and substantially built, the top width of the second course varying from 1 foot to 1 foot 6 inches. The interior was found to contain black mould and yellow sand, mixed at the top through previous disturbance, but the bottom portion contained sand only.

Both mould and sand contained osseous remains, the portions in the mould being very fragmentary, and those in the sand larger, though very few recognisable pieces, except portions of the skull, were noticed. With

the bones were a number of small pieces of charcoal. Proceeding further, the bottom of the cist was found to consist of hard yellow sand which had never been disturbed, and which contained no bones. From the top of the second course to the bottom of the cist was 1 foot 9 inches, and I conjecture the cist, when perfect, to have been about 2 feet 6 inches deep. The bottom portion of the wall of the cist was formed by eight flat stones of irregular height, from 1 foot to 1 foot 6 inches high, and 5 to 7 inches broad, placed upright on edge, and after these had been built round outside, and their heights equalised by the addition of smaller stones, the two courses, already alluded to, had been built upon them, the remains deposited within, and the capstone placed over the whole. The contents of the cist seemed to have been but little disturbed, and nothing save the soil, charcoal, and bones were found within.

We now began excavating a trench all round the cist, about 2 feet wide. The cist was found to have been constructed, as far as we could judge, in the hard sand alone. This outer sand contained no remains and we now proceeded to remove the black mould all round for some little distance, and to sift it with great care. Portions of compact black mould, containing many minute fragments of bone, were first found; and it seemed that this, from its resemblance to the mould containing bones within the cist, had been removed along with the top course of stone. Colour was further lent to this by finding, along with this mould, several small sandstone slabs, similar to those used in the construction of the second course of the cist.

We now began to widen the area of our operations. On examining the mould taken from a spot about a yard to N.W. of the cist a piece of rude pottery, accompanied by pieces of bone¹ and charcoal, was found. A diligent search revealed several other pieces, apparently forming the lip and a portion of the side of a rude baked clay urn, the pottery being reddish coloured outside, but black in the fracture. No portion of a bottom was found, and I am decidedly of opinion that these pieces of pottery formed part of the urn which had been discovered two or three

¹ One piece of bone resembled a finger or toe joint. A friend has suggested that it might have formed a portion of the *fibula*.

years previously near this spot, and which was broken at the time by an ignorant labourer. Having submitted the bottom of the urn, as well as the portions of the lip found by me, to Dr Joseph Anderson, he concurs in the opinion I had formed, and says :—"The urn has been a large and wide vessel, but not exceptionally so. Unfortunately, we have not enough of the pieces to discover the height and diameter at the mouth." The missing pieces may probably be accounted for, as having been taken away attached to the bottom and afterwards broken off and lost, the material being very brittle.

I am convinced that this urn was not originally within the cist. When it was first discovered, no mention was made of the cist. And again, when the cist was discovered in the process of trenching early in 1883, it appeared never to have been disturbed before, and those who were present are positive that no urn was noticed. The urn therefore must have been deposited in the soil outside the cist, and probably without any protecting structure. Such a burial is by no means uncommon in the British Islands and Scandinavia, and wherever large tumuli exist, it is customary, as all archæologists know, to find enclosed in them burials of different periods, both crematory and non-crematory.¹

I have already mentioned that the mould and sand within the cist contained very many fragments of bones and charcoal, but nothing further was found which could positively be connected with the cist-burial, which was manifestly one by cremation, judging, not by the charcoal alone, but also by the condition of the bones and the size of the cist, which could not have contained a skeleton, even in a contracted posture. I have also stated that some detached pieces of bone were found in the soil outside the cist, with pieces of charcoal and portions of an urn; and, taking everything into consideration, I conclude that these point to cremated remains having been originally deposited within the urn, as the pieces of bone differ in size from the very fragmentary bones found in the black mould of the cist, and as the larger pieces of bone found imbedded in the sand of the cist had never been disturbed till removed by me.

¹ Greenwell, *British Barrows*, p. 12 *et seq.*; L. Jewitt, *Gravemounds, and their Contents*, p. 7 *et seq.*; O. Montelius, *La Suède Préhistorique*, pp. 75, 76.

Want of time prevented a further exploration of the mound, which might have resulted in the revelation of other sepultures. But I am of opinion that our exploration proved that two separate burials were represented, one in a cist, the other in an unprotected urn, but both cremated.

Whilst gathering together the broken pieces of the urn, a round-nosed flint flake or scraper¹ (fig. 1), chipped at the edges, was found amongst the débris, and proved to have a bluish tinge, as if it had been subjected to the action of fire. Close beside it there was found a round piece of iron pyrites, flat on one side—in shape somewhat like the half of an egg, divided lengthways, only smaller (see fig. 1). Dr Joseph Anderson

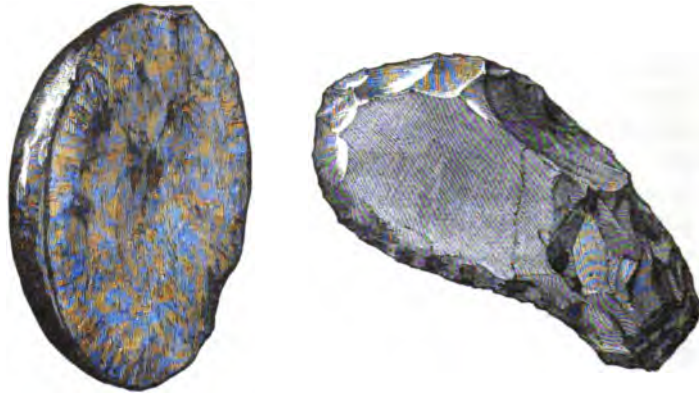


Fig. 1. Nodule of Pyrites and Scraper of Flint, found at Flowerburn.

at once recognised this as forming, along with the solitary flint, nothing less than a prehistoric "strike-light" apparatus, only one example of which is recorded, I believe, as having been found in Scotland,² and

¹ No flints are noticeable in that part of Ross-shire, and both Mr Davidson of Cantray, and Dr Mackenzie of Fortrose (to whom I showed it), as well as myself, were impressed with the importance of this flint scraper. Every effort was made, and the closest search instituted, in the hope of coming across other scrapers or flakes of flint, but without success; and I am perfectly satisfied that the implement in question was the only one present.

² At Tyueside Farm, near Minto, Roxburghshire, by Lord Rosehill; Greenwell, *British Barrows*, p. 266, note, and *Proc. Soc. Ant. Scot.*, vol. viii. p. 137.

but few elsewhere. As the flint and pyrites were found on the same spot as the fragments of urn, it is most probable that they formed part of the same burial. It is possible even that they were about the person of the corpse when cremated, and colour is lent to this supposition by the fact that the flint bears traces of the action of fire. As to whether the "strike-light" was contained in the urn, that is another question, on which in the circumstances no sufficient evidence is forthcoming.

As the flint and pyrites (sulphuret of iron), now before the meeting, is the first example of a prehistoric "strike-light" which has been brought before this Society, I may be pardoned if I make some remarks relative to "strike-lights" in general, with a view to render clearer, if possible, the antecedents of this one in particular. The first point is to prove that these two objects do actually form a "strike-light," or to answer Mr Evans' pertinent question—"We have instances of the association of lumps of iron pyrites with circular-ended flint instruments in ancient interments. Can they have been in use together for producing fire?"¹

We will first consider the flints. Mr Evans has remarked that nearly similar forms of flint flake or scraper have served undoubtedly dissimilar purposes. For besides those which are believed to have been used for cleaning hides, &c., "we find some of these instruments with the edge battered and bruised to such an extent that it can hardly have been the result of scraping in the ordinary sense of the word."² He argues that as fire must have been one of the primary necessities of prehistoric man, we must consider whether he was in possession of any method for generating fire, other than that of the slow and laborious process of friction; and he cites the example of two widely-distant races, the Esquimaux and Terra-del-Fuegians, who obtain fire by striking sparks into a ball of fungus, and whirling it round till it bursts into flame. He further remarks:—

"There is yet another argument. In many instances these circular-ended flints, when found upon the surface, have a comparatively fresh and unweathered appearance; and, what is more, have the chipped part stained by iron mould. In some cases there are particles of iron, in an oxidised condition,

¹ Evans, *Ancient Stone Implements*, p. 282.

² *Ibid.*, p. 281.

still adherent. Such iron marks, especially on flint which has weathered white, may, and indeed commonly do, arise from the passage of harrows and other agricultural implements, and of horses shod with iron, over the fields ; but did the marks arise merely from this cause, it appears hardly probable that in any instance they should be confined to the chipped edge, and not occur on other parts of the flint.”¹

And he finally clinches his argument by the results of his own experiments. For he finds that by working “a flint and a steel or *briquet* together, much the same bruising of the edge is produced as that apparent on some of the old ‘scrapers,’” and he comes, “therefore, to the conclusion that a certain portion of these instruments [flint flakes] were in use, not for scraping hides like the others, but for scraping iron pyrites, and not improbably, in later days, even iron and steel for procuring fire.”²

We now turn to the iron pyrites, and ask, Is it possible that the nodules of this substance, found in connection with chipped flint flakes, can have been in use for any other purpose than that of obtaining fire ?

Mr Evans has remarked upon the presumed use of iron pyrites for obtaining a red pigment, that—

“It is hard to imagine any other purpose for which pyrites could be scraped by flint except for producing fire. It cannot have been merely for the purpose of producing a paint or colour, as though the outer crust of a nodule of pyrites might, if ground, give a dull red pigment, yet the inner freshly broken face would not do so ; and, if it would, the colour would be more readily procured by grinding on a flat stone, than by scraping.”³

Canon Greenwell, writing on the same subject, also observes—

“It is true that certain ores of iron have long been employed by savage tribes as a source from which to obtain a red pigment, whether for their own personal adornment or for colouring articles of dress and implements, but the particular ore to which the nodules [of iron pyrites] under notice belong is not adapted for producing any pigment when in a fresh and unoxidised condition ; neither are the appearances of wear upon the pyrites those that would have resulted from a scraping process necessary in the production of such a substance. There certainly are the marks of what may perhaps be called scraping along the middle of the fractured surface of the nodules ; but that is just the part

¹ Evans, *Stone Implements*, p. 283.

² *Ibid.*, p. 283.

³ Evans, *Stone Implements*, p. 285.

where the ore would be quite fresh and unoxidised, and therefore the least available for use in providing a pigment."¹

We may therefore, at once, and safely, assume that none of the nodules of pyrites found in connection with flints were in use for any other purpose than that of strike-lights; and that the flint and pyrites, now before the meeting, form together a veritable strike-light, an assumption which other discoveries, to be subsequently referred to, will fully substantiate. A nodule of pyrites, with a deep scoring upon it, found in one of the Belgian bone caves—the *Trou de Chaleux*—has been engraved by Dr E. Dupont, who regards it as having been used as a fire-producing agent.² This takes us back to an era contemporaneous with that of our own Kent's Cavern at Torquay, in which, however, no remains of pyrites of iron have yet been discovered.

Several instances of the occurrence of pyrites and flint in British burials are on record, while "part of a nodule of pyrites may be cited which had apparently been thus used, and was found in the Lake-dwelling of Robenhausen."³ Engelhardt found pieces of pyrites, apparently having been used as fire-producers, at Thorsbjerg, "with iron and other antiquities of about the fourth century of our era. He says that steels for striking fire are not at present known as belonging to the Early Iron Age of Denmark."⁴ The Abbé Cochet describes some of the flints found with Merovingian interments [from the middle of the fifth to the middle of the eighth century], as resembling gun-flints. One of these was apparently carried at the waist, in a purse with money and other necessities.⁵ Passing to more modern times, we know that pyrites was in use as a spark-producer some two hundred years ago. About the year 1530, the match-lock was superseded in England by the wheel-

¹ Greenwell, *Brit. Bar.*, p. 267.

² The flint that produced the scoring appears to have had a pointed rather than a rounded end. Possibly the wearing away of the ends of certain flakes, for which it has been difficult to account, may be due to their having been used in this manner for striking a light.—Evans, *Stone Implements*, p. 286; Dupont, *Les Car. de la Belgique*, ii. pl. ix. 2.

³ Evans, *Stone Implements*, p. 14; Morlot, in *Rev. Arch.* (1862), v. 216.

⁴ *Ibid.*, p. 14, note; Engelhardt, *Thorbjerg Mosefund*, p. 65, Eng. ed.

⁵ *Ibid.*, p. 382; Cochet, *Normandie Souterraine*, p. 258.

lock, which had been invented in Nuremberg seventeen years before. The wheel-lock remained in partial use as late as the reign of Charles II. It "consisted of a steel wheel rasped at the edge, which protruded into the priming pan; a strong spring; and a cock into which was fixed a piece of pyrites (sulphuret of iron). . . . When it was required to discharge the gun, the lock was wound up by means of a key or spanner which fitted on the axle or spindle, and the cock was let down to the priming pan, the pyrites resting on the wheel; on the trigger being pressed the wheel was released and put in motion, when sparks were emitted which set fire to the powder in the pan."¹ This was probably the last occasion when pyrites, as a fire-producer, was employed for any purpose of practical utility.²

Mr Evans is of opinion that the late use of pyrites "affords strong evidence of iron and steel having been unknown to the makers of flint implements;"³ and he has further more shrewdly observed, that "the lower beds of our English chalk are prolific of pyrites, though not to the same extent as the upper beds are of flint; and it is not impossible that the use of a hammer-stone of pyrites, in order to form some instrument of flint, gave rise to the discovery of that method of producing fire."⁴ In view of this prolificacy, it may prove a matter of surprise that no more than eleven cases (including the one now before the Society) are on record, in which pyrites and flint have been found in ancient British graves, under such circumstances as to warrant their being classed as strike-lights. Flint scrapers, which, however, are almost indestructible, are certainly found in many parts of the country, notably in places which had once been centres for the production of worked flints.⁵

¹ School of Musketry, *Text-Book*, p. 94.

² There is, however, one little machine, still in use, as a cigar-lighter, which reminds me forcibly of the wheel-lock. It consists of a small silver or steel box, containing a "rat's tail," or cotton match, which is ignited from a spark obtained by a steel rasp working against an emery wheel which is made to revolve.

³ Evans, "*Stone Implements*," p. 14, note.

⁴ *Ibid.*, p. 281.

⁵ At Cisbury Hill, near Worthing, Sussex, the author has collected hundreds of scrapers and chips, and here the ancient shafts or workings were explored some years ago, under the auspices of the trustees of the British Museum, but with little result.

But though flints may be numerous, it is not so with nodules of pyrites. This, however, may be partially due to the fact which Evans remarks, that "when exposed upon or near the surface of the ground, pyrites is very liable to decomposition, and even if occurring with ancient interments it would be very likely to be disregarded."¹

This latter is the real, or at least the chief, point of remark. The flints and nodules of pyrites found in graves do not seem to have been conclusively regarded as strike-lights, until the investigations of Evans and the discoveries of Greenwell brought them into prominent notice, and practically demonstrated them to be so. Many, therefore, have in all probability been cast aside unrecognised and unrecorded.

It may, therefore, be of some importance to notice the instances in which pyrites and flint have been found in British graves. Evans states that "nodules of pyrites occurred in such numbers in a barrow at Broad Down, near Honiton, as to suggest the idea of their having been placed there designedly, but none of them are described as abraded." It was in the year 1844 that the late Mr Thomas Bateman, when opening a barrow in Elton Moor, Derbyshire, found near the head of a skeleton "a piece of spherical iron pyrites, now for the first time noticed as being occasionally found with other relics in the British tumuli." Along with the same skeleton was found a "drinking-cup" [*i.e.*, a clay vessel of drinking-cup shape], "a flat piece of polished iron ore; a small celt of flint, with the peculiarity of having a round polished edge instead of a cutting one as is usual; a beautifully chipped cutting tool; twenty-one circular instruments, almost all neatly chipped; and seventeen pieces or rude instruments, all of flint."² At Green Lowe, Derbyshire, Mr Bateman further found with a skeleton "a piece of spherical pyrites, and a flint instrument of the circular-headed form," also a drinking-cup, and splendid flint dagger, some barbed flint arrow-heads, and instruments of bone.³ Again, at Dowe Lowe, Derbyshire, Mr Bateman discovered a skeleton which "was accompanied by a fluted bronze dagger, and an amulet or orna-

¹ Evans, *Stone Implts.*, p. 281.

² Evans, *Stone Implts.*, p. 282; Bateman, *Vest. Ant. Derb.*, p. 53.

³ Evans, *Stone Implts.*, p. 282; Bateman, *Vest. Ant. Derb.*, p. 59.

ment of iron ore, with a large flint implement which had seen a good deal of service."¹ In a barrow at Brigmilston, Wiltshire, Sir R. Colt Hoare found, with an urn containing ashes, some "chipped flints prepared for arrow-heads, a long piece of flint, and a pyrites, both evidently smoothed by usage."² In a barrow at Angrowsee Mullion, Cornwall, a pyrites was found with a deep groove worn on the flat surface, in company with an urn and a bronze dagger.³ Evans says:—"Mr Franks has called my attention to another half nodule of pyrites preserved in the British Museum, which is somewhat abraded in the middle of its flat face, though not so much so as that from Yorkshire. It was discovered, with flint flakes, in a barrow in Lam-borne Down, Berkshire, by Mr E. Martin Atkins, in 1851."⁴ Greenwell states that:—"Lord Rosehill found with a burnt body in a cist at Tyneside Farm, near Minto, Roxburghshire, a slice of a nodule of iron pyrites, together with a long and thick flint flake, apparently a flint and steel."⁵

We now come to the instances of the occurrence of pyrites with flint discovered by Greenwell, and very accurately figured and described by him as well as by Evans. Greenwell thus describes an interment examined by him in a barrow in the parish of Rudstone, East Riding of Yorkshire:—

"Immediately beneath the child was an oval grave, north-east and south-west, 8 feet by $4\frac{1}{2}$ feet at the bottom, and 9 feet by $8\frac{1}{2}$ feet at the surface-level, and $6\frac{1}{2}$ feet deep. It was filled in with chalk. On the bottom of the grave was a quantity of charcoal. At the bottom of the grave, about the middle, was the body of a man, laid on the left side, with the head to S.E. by E., the right hand being up to the face and the left on the upper part of the stomach."⁶ [The following articles were found with the body:—a white stone of mica-schist, an engraved jet ring, a plain jet button, a jet button engraved with a Maltese cross, and a bronze knife-dagger, and rivets which had once held an ox-horn handle:—] "A little nearer to the face were two articles, a 'flint and steel,' not hitherto noticed as such in their relative capacities, though

¹ Greenwell, *Brit. Bar.*, p. 266; Bateman, *Vest. Ant. Derb.*, p. 96.

² Evans, *Stone Impls.*, p. 282; Hoare, *South Wilts*, p. 195.

³ Greenwell, *Brit. Bar.*, p. 266; Borlase, *Nenia Cornubiæ*, p. 235.

⁴ Evans, *Stone Impls.*, p. 285.

⁵ Greenwell, *Brit. Bar.*, p. 266.

⁶ Greenwell, *Brit. Bar.*, p. 263.

they have been before found with ancient British interments. The steel had been made from a round nodule of iron pyrites split in half; the flint was placed below the split nodule which rested upon it, the flat surface being downwards; the flint is $2\frac{1}{4}$ inches long and $\frac{3}{4}$ inch square. Both show signs of continued use, in their worn and smoothed edges, but the spark of fire seems principally to have been obtained by rubbing the end of the flint along the flat surface of the nodule, which is worn into a considerable groove in consequence. The nodule has had a portion ground off on the rounded surface, probably in order to remove a projecting piece which rendered it inconvenient to handle."¹

Evans thus describes this half of a nodule of iron pyrites, and the long round-ended flake of flint (see fig. 2) which lay underneath it—²

"A portion of the outside of the pyrites has been ground smooth, and a projecting knob has been ground down so as to bring it to an approximately

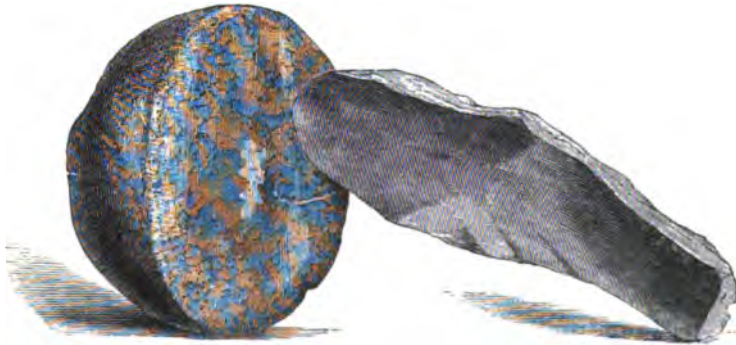


Fig 2. Flint Scraper and Nodule of Pyrites, found in a grave at Rudstone, Yorkshire.

hemispherical shape, and adapt it for being comfortably held in the hand. The fractured surface, where the nodule was broken in two, is somewhat oval, and in the centre, in the direction of the longer diameter, is worn a wide shallow groove (see fig. 2), of just the same character as would have been produced by constant sharp scraping blows from a round-headed flake or scraper, such as that which was found with it. The whole surface is somewhat worn and striated, in the same direction as the principal central groove;

¹ Groenwell, *Brit. Bar.*, p. 264.

² The Society is indebted to Mr John Evans for this and the following woodcut from his *Ancient Stone Implements of Great Britain*.

and the edge of the flat face of the pyrites is more worn away at the top and bottom of the groove than at the other parts. The scraper (see fig. 2) is made from a narrow thick external flake, the end of which has been trimmed to a semicircular bevelled edge; a portion of one side has also been trimmed. At the end, and along some parts of the sides, this edge is worn quite smooth, and rounded by friction, and there are traces of similar wear at the butt end."¹

Greenwell discovered another specimen in the same barrow—

"At the south-west end of the first grave there was an extension, forming a second one, not so deep as the first by a foot. It extended 7 feet to the south-west, with a width of $4\frac{1}{2}$ feet. At the north-east end of it was the body of a man, laid on the left side, with the head to S.E., the right hand being up to the face and the left on the stomach. The body was but slightly contracted, the head being $3\frac{1}{2}$ feet away from the knees. Behind the back were two jet buttons, placed one upon the other; close to them, on the north, was another 'flint and steel,' almost indetical in form and appearance with those found in the preceding grave, but both of the latter showing signs of having been a longer time in use. As in the first instance, the nodule of pyrites was placed upon the flint."

Mr Evans, referring to the occurrence of the pyrites and flint in the second grave in this barrow,² says:—"There can, I think, be no reason-

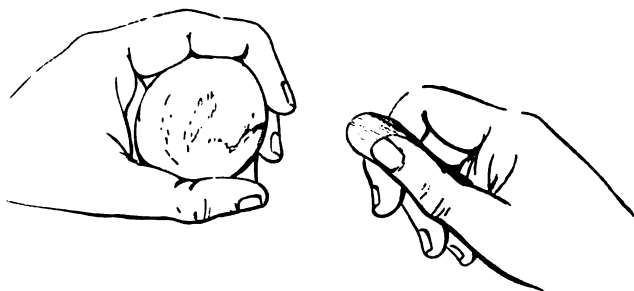


Fig. 3. Method of using Pyrites and Scraper of Flint for striking a Light.
(From Evans' *Ancient Stone Implements of Britain*.)

able doubt of their having been, in these instances, fire-producing implements, used in the manner indicated in the annexed figure (see fig. 3). The finding of the two materials together, in two separate

¹ Evans, *Stone Impls.*, p. 284.

² Greenwell, *Brit. Bar.*, p. 265.

instances, in both of which the pyrites and the flint present the same forms and appearance, establishes the fact of their connection."¹ Speaking of the Rudstone barrow, Greenwell observes that it presents some features which seem to require a more particular notice than the mere record of their occurrence :—

"The most important matter is the discovery of two articles which cannot have been anything else than a 'flint and steel,' the means of producing fire. So far as I know, this is the first instance of anything of the kind appertaining to the Bronze Age having been specially recorded; and although the probability that in these early ages fire was obtained by such a process may have suggested itself to many, as it has indeed to myself, still, before this discovery of the 'flint and steel,' unmistakably adopted and also used for that purpose, there was no tangible evidence of the fact. This evidence seems now to be supplied by the contents of the present barrow; for not only were the two materials—the flint and the iron pyrites—found in such juxtaposition as to imply connection the one with the other, but both by their appearance clearly indicate the nature of that connection and mutual use; the bruised and smoothened edges and ends of the flints and the grooved surface of the pyrites showing tokens of long-continued reciprocal friction. . . . The marks in question have no doubt been made, as has already been mentioned, by rubbing the flint rapidly across the flat surface in the process of obtaining the required spark. The value of the evidence is further enhanced by the fact, that like articles occurred in connection with two separate interments, under precisely similar circumstances, and with exactly identical appearances of use upon them. It might be naturally expected that a people who had so far progressed in civilisation, as the various remains belonging to the Bronze Period attest that the inhabitants of Britain had at that time arrived, would have attained to some better mode of producing fire than the tedious process of rubbing two sticks together, or even by the use of a fire drill. There was, however, no evidence to show in what improved way so important an essential to human existence, especially in a climate like ours, might have been obtained at the time in question, until this important discovery in the barrow at Rudstone supplied the interesting fact. It might seem strange that a people who were dealing in this manner with an ore of iron should not have made the discovery of the possibility of smelting it, if we did not bear in mind that the different pyretic ores are intractable enough to bid defiance to the appliances of modern science."²

The third instance in which Greenwell discovered flint with pyrites

¹ Evans, *Stone Implements*, p. 285.

² Greenwell, *Brit. Bar.*, p. 256 *et seq.*

TABLE OF INSTANCES OF THE OCCURRENCE OF PYRITES AND FLINT IN BURIALS IN GREAT BRITAIN.

Note.—The letter "F" stands for Finder.

No.	County.	Locality.	Finder or Authority.	Burial.		
				In	Character of.	Remains of.
1.	Cornwall	Angrowse Mullion	Borlase ¹	Barrow	?	?
2.	Wiltshire	Brignilston	Sir R. Colt Hoare (F.) ²	Do.	Cremated	Urn with ashes
3.	Berkshire	Lamborne Downe	Now in the British Museum, E. Martin, Atkins (F.) ³	Do.	?	?
4.	Derbyshire	Elton Moor	Bateman (F.) ⁴	Do.	Inhumed	Skeleton
5.	Do.	Green Lowe	Do.	Do.	Do.	Do.
6.	Do.	Dowe Lowe	Do.	Do.	Do.	Do.
7.	Yorkshire	Rudstone	Greenwell (F.) ⁵	Do.	Do.	Do.
8.	Do.	Do.	Do.	Same barrow as above	Do.	Do.
9.	Westmoreland	Crosby Garrett	Do.	Cairn	Do.	Do.
10.	Roxburgh	Tyneside Farm, Minto	Lord Rosehill (F.) ⁶	Cist	Cremated	Burnt body
11.	Ross-shire	Flowerburn, Fort-rose	Mackenzie (F.)	Mound containing cist	Cremated	Urn with bones and charcoal

¹ Borlase, *Nenia Cornubica*, p. 235; Greenwell, *Brit. Bar.*, p. 266.

² Hoare, *Ancient Wills*, vol. i. p. 195; Greenwell, *Brit. Bar.*, p. 266; Evans, *Ancient Stone Implements*, p. 282.

³ Evans, *Stone Implements*, p. 285; Greenwell, *Brit. Bar.*, p. 266.

⁴ Bateman, *Vestig. Ant. Derb.*, p. 53; Evans, *Stone Impls.*, p. 282; Greenwell, *Brit. Bar.*, p. 266.

⁵ Greenwell, *Brit. Bar.*, pp. 268-269, 390, 391; Evans, *Stone Impls.*, pp. 284-285.

⁶ Greenwell, *Brit. Bar.*, p. 266; *Proc. Soc. Ant. Scot.*, vol. viii. p. 137.

Character of other Articles found in Burial, viz., of					
Pyrites.	Flint.	Pottery.	Stone.	Metal.	Bone, &c.
1. Half nodule with deep groove	None mentioned	Urn	...	Bronze dagger	...
2. Smoothed by age	Bearing marks of wear	Urn (sepulchral)	Flint arrow heads	..	...
3. Half nodule somewhat abraded in middle of flat face	See "Stone"	...	Flint flakes	..	...
4. Spherical	See "Stone"	Drinking cup	Flint celt (round polished edge), chipped cutting flint, 21 circular abraded flints, and 17 flakes	Flat piece of polished iron ore	...
5. Spherical	Round headed	Drinking cup	Flint dagger and arrow-heads	..	Bone instruments
6. Amulets or ornaments of iron ore	Large. Had seen service	...	...	Fluted brass dagger	...
7. Split nodule, worn groove	Smoothened edges and worn	...	Whetstone	Bronze knife dagger	Jet button, engraved button, jet ring
8. Split nodule, longer in use than above	Longer in use than above	...	...	..	2 jet buttons
9. Piece of iron ore, much oxidised	Long thick piece of chert, end worn smooth by long use	...	Chert knife	..	Perforated hammer of red deer's horn. Jaw of fox
10. Slice of nodule	Long and thick flake	Urn (sepulchral)	...	...	...
11. Half nodule abraded	Showing signs of wear	Urn (sepulchral)?	...	...	...

in an interment, was in a cairn in the parish of Crosby Garrett, Westmoreland. He thus describes it :—

“The first of the three cairns was of rather an unusual form, being markedly oval, 66 feet long and 40 feet wide, with the longer diameter north and south. . . . There cannot have been fewer than a dozen unburnt and burnt interments, and it is probable that there were more. . . . Five feet south of the present centre, but probably at what had in the first instance been the centre, and if so then the primary interment was the body of a young man, from twenty to twenty-four years of age, which had happily almost entirely escaped disturbance. He was laid on the right side, with the head to N. and the hands up to the face. In front of the knees was a hammer, made from the brow end of a red deer's antler. . . . Between the humerus and the radius and ulna of the right arm was a long and thick piece of chert, triangular in section, and having the lower end worn quite smooth by long continued use. In the right hand was a piece of iron ore much oxidised, no doubt the ‘steel’ with which, in combination with the chert flake just described, this ancient Briton had obtained fire. This is the third instance where I have met with a man buried with his ‘flint and steel,’ the other two having both been in one barrow near Rudstone. In front of the face was another and thin flake of chert; it is $2\frac{1}{2}$ inches long, $\frac{1}{4}$ inch wide, chipped along both edges, and has most probably served the purpose of a knife. Close to the body was half the lower jaw of a young fox.”¹

In order to render the foregoing information more useful as a means of comparison, I have prepared the preceding tables (pp. 366, 367).

A glance at these tables serves to bring forward several important facts :—

- I. That an 11th example of the pyrites and flint “strike-light,” has been added to the already recorded 10 found in Great Britain.
- II. That the area of finds, formerly ranging from Cornwall to Roxburgh, has now been extended to Ross-shire.
- III. That the northern counties of England have been the most productive of these finds, claiming 6 out of 11 (viz., Derby, 3; Yorkshire, 2; Westmoreland, 1), as against 3 in the southern counties, and 2 in Scotland, according to present geographical distribution.
- IV. That they are usually contained in barrows.

¹ Greenwell, *Brit. Bar.*, p. 389 *et seq.*

- V. That they belong to both the cremation and inhumation periods, and that they are found with skeletons, burnt remains, and ashes contained in urns.
- VI. That though the nodules of pyrites are sometimes spherical in shape, they are usually split, as affording a better surface for obtaining the spark, and they, as well as the flint, in most cases show signs of wear and long use.
- VII. That they were used cœvally with the manufacture of pottery, as evinced by the presence of urns and "drinking cups."
- VIII. That in Great Britain their use continued at least from the Later Stone Period till the Later Bronze Period, the latter being proved by the presence of 3 bronze daggers, one fluted.
- IX. That they continued in use until an epoch when art had made a considerable advancement in this island, as evinced by the fluted dagger and the engraved jet ring and button.
- X. That no article of wrought iron has been found in British burials, in conjunction with flint and pyrites.

We now come to the last portion of our inquiry, viz., the period to which, and the people to whom, these burials containing strike-lights belong.

We see, from the preceding table, that flint and pyrites were in use in Britain as strike-lights during a considerable period; and that the few examples found range over a considerable area. We also see that examples have been found in localities which produce neither pyrites or flint; and from this, and other circumstances, the strike-light seems to have been among the most treasured possessions of the early Britain, accompanying him even to the tomb. We further see that no articles of iron have been found with strike-lights in British burials. But the Thorsbjerg find proves that pyrites and flint were still in use during the Early Iron Age. We must therefore avoid laying down a hard-and-fast rule, though we may, I think, safely assume that the proper period of the strike-light ranges from the Later Stone to the Later Bronze Age. Until the crania of the barrows, in which strike-lights have been found, have been thoroughly described, we shall remain in considerable ignorance as to the race or races therein

interred; while in cremated burials we have, of course, no crania to guide us. Any opinions, therefore, as to the personality of the users of these strike-lights, must be based almost entirely on conjecture. I therefore merely start an idea in suggesting that these strike-lights were in use by our Celtic ancestors; as well, probably, as a Turanian race, allied to the modern Lapps or the Esquimaux (amongst which latter people we know pyrites and flint to be still in use for producing fire), who preceded them as occupants of these islands.

IV.

NOTICE OF STONE CIRCLES, IN THE PARISH OF OLD DEER; WITH PLANS. BY REV. JAMES PETER, F.S.A. Scot.

In the parish of Old Deer or Deer the stone circles must have formed from a very remote period a notable feature in the landscape. According to the late Dr Stuart, there were almost within the memory of man twelve circles, generally pretty complete; and on the testimony of an aged man still alive, who had the intelligence from those who were old in his young days, several more had existed.

So long as agriculture was in its infancy, and when there was little disposition to cultivate any land but that which was of fair quality or free from obstacles, coupled perhaps with a belief that it was uncanny to meddle with that which, through age, and the mystery naturally attaching to these colossal stones set upright in regular order, they had an impunity from the hand of the destroyer; but when land increased in value, through improved methods of agriculture, and the introduction of extraneous manures, old boundaries and the most sacred enclosures were ruthlessly swept away.

Before proceeding to a description of the individual circles, with a detail of their form and their respective measurements, as shown in the outlines and sketches herewith submitted, it may be deemed fitting that, as an introduction to this paper, some description should be prefaced of the district in which they are situated.

The district of Deer or Old Deer, so called after a large part of it

had been detached in 1694 to form a separate parish, then named New Deer, occupies the centre of the large district of Aberdeenshire known as Buchan. Its mean length from N. to S. is about 11 miles, with a mean breadth of 5 to 6. It is intersected from W. to E. by the small stream called the Ugie, on which are situated the parish church where religious houses have successively stood since the first was planted by St Columba in the year 673, according to Adamnan his biographer; and the Cistercian Abbey of Deer, a mile to the west, founded in 1219. From this point—the parish church—the sea is distant on the east 10 miles (at Peterhead) and on the north (at Fraserburgh) 14. Its surface is diversified, consisting mostly of a succession of rounded knolls or hills not exceeding 500 feet. It is on the summits of the secondary knolls, about 350 feet above the sea, that the stone circles have been erected.

From very early times the district must have sustained a large population, if we may judge from the great number of *tumuli* containing urns or other memorials of the dead; while on either side the stream referred to, for 3 miles to the west of the church, and at right angles to the line or disposition of the stone circles, almost every height shows traces of a rath or circle of varying proportions. We pass by these as only interesting in connection, though bearing testimony to the fact of a considerable population having existed at a period long anterior to written history.

With this paper is submitted a reduced Ordnance map, on which are placed marks showing the exact position of the circles existent, in part, as well as of those whose locality is well ascertained, though every vestige of them has disappeared. The circles in *red* are distinguished as those which, though incomplete, are marked by stones standing, while those extinct are filled in in black.

On referring to the map, it will be seen that a certain regularity attaches to their position; while an examination of them singly, in relation to their contiguity, suggests that the chain (if we may so designate the series) was so constructed, that each link should be so placed as to be visible from the nearest. Thus the circle numbered 2 is visible from 1, 3 from 2, and so on to the last; while from Aikey Brae Circle, the

centre one, all, but for the intervening modern woods, would be visible on either side.

The following are the individual circles in detail :—

No. 1. *Strichen Circle*.—The most northerly, above Strichen House, just outside the parish of Deer, but forming part of the group. The stones are composed of grey granite, unlike all the others to be noticed, which are of whinstone or highly crystallised gneiss. The recumbent stone (fig. 1) is narrower than any in the group, being only $1\frac{1}{2}$ foot across, owing to the square cleavage. There is a peculiarity attending this circle, that the recumbent stone and its side stones, if we may so designate them, are placed on the north of the circle instead of the south, all others



Fig. 1. Recumbent Stone with its two uprights in Strichen Circle.

being to the south, while the recumbent stone has (on its east end) been hollowed atop for some purpose. Trending to the S.E. from this point is

No 2. *White Cow Wood Circle*, with dolmen enclosed.—This circle (fig. 2) is 40 feet in diameter, and the circumference is lined out by a number of small, sharp stones, none of them over 2 feet 4 inches in height. At the S.E. point some stones have been removed to a little distance, to allow of ingress. The dolmen is formed of five supporting stones, one on the east and two on either side. It was open to the west. The covering stone lies at an angle towards the N.E., so that one standing at west, and running his eye along the centre, would find the line of vision strike the horizon on or about the point where the sun rises at mid-

summer. The dolmen is not exactly in the centre of the circle, but in the N.E. quadrant, only the S.W. supporting stone being near the centre.



Fig. 2. Sketch of White Cow Wood Circle (diameter 40 feet—not to scale).

No 3. *Auchmachar Circle*.—This circle was comparatively complete until about forty years ago. The recumbent stone remains in position, but was shattered several years since by the kindling on it of a Halloween fire. One of its side stones remains erect. The other is thrown down; while beyond it, or two spaces or distances, a stone is

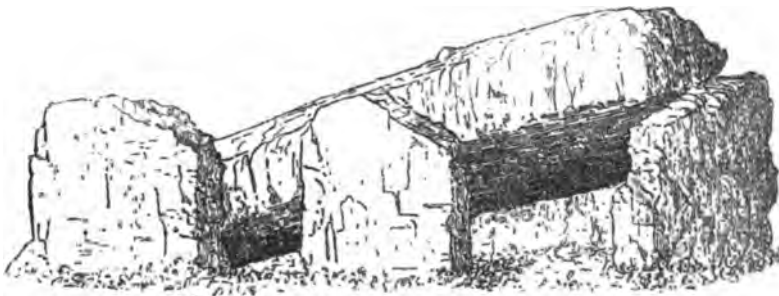


Fig. 3. Enlarged View of Dolmen in White Cow Wood Circle.

standing in position, having been spared, as forming a handy rubbing stone for cattle. One large stone had been removed, and laid lengthwise to form a good portion of a stone fence; another had been long since

taken to be used as a bridge across a small burn; another had been utilised for the keystone of a thrashing mill support. The form of this enclosure seems to have been an oblong. From being able to identify the exact spot, through one who had assisted at the removal of one of the absent stones, sufficient data were obtained to realise the form and size of the circle. The size of the single stone is considerably in excess of the average, and when complete and standing in the skyline, the circle must have formed an imposing object. So far as could be ascertained this circle would appear to have been an exact counterpart of the next to be noticed, situated about a mile east, viz.,



Fig. 4. Recumbent Stone with its two uprights in Loudon Wood Circle.

No 4. *The Loudon Wood, Pitfour Circle.*—This circle can be traced without difficulty, in consequence of the recumbent stone and its side stone on the west being still in position, as shown in fig. 4, while the other side stone on the east has simply fallen over. Besides, on either side, and about the middle of the circle, there is still one of the stones standing as originally placed. The ground plan of the circle is shown in fig. 5.

No 5. *Aikey Brae or Parkhouse Circle.*—This is the most complete circle of the group. Its recumbent stone is the largest of those still extant, formed of whinstone, and weighing according to estimate, 21 tons. The circle is wholly complete on the west side, with the exception of the

stone next to the recumbent stone, which has fallen, and in so doing broken in two. On referring to the ground plan (fig. 6), it will be seen that there is a graduation in height, the stones being of less size towards the north. The section at the base of the stone shows in each case a rude triangle pointing to the centre of the circle. On the opposite side the stones are still on the spot, though broken, more or less, and their original position is easily ascertained.

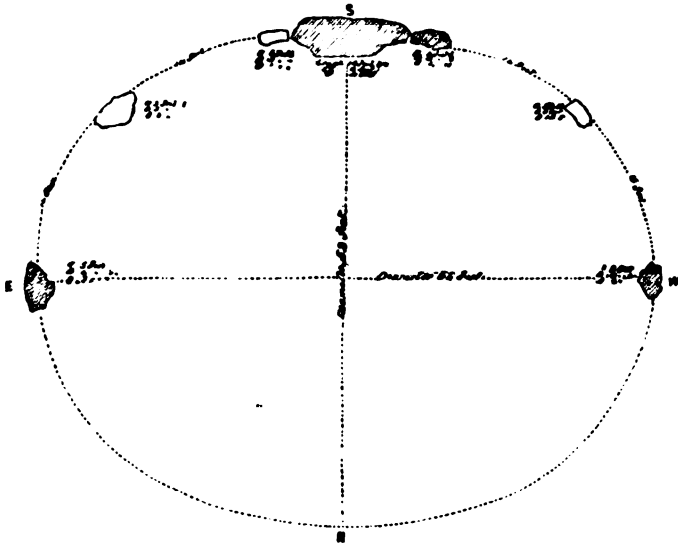


Fig. 5. Ground Plan of Loudon Wood Circle (diameter 64 feet).

No. 6. *Upper Crichtie Circle*.—This circle was destroyed nearly one hundred years ago, according to the testimony of one whose father was witness to the destruction.

It would appear the stones were sold by the tenant *en bloc*, to aid in building a steading. Not long after it was noted that his family were visited by illness, one after the other dying. The superstition of these days was at no loss in assigning a cause. As in the case of the Keiths, after their forcibly appropriating the lands pertaining to the Abbey of

Deer, the lines referring to their so-called sacrilege in Pratt's *Buchan* may be quoted here as embodying the general belief—

“Meddle nae in haly things ;
For gin ye dee,
A weird, I rede, in some shape
Shall follow thee.”

No. 7. *East Crichtie Circle*, entirely destroyed about 60 years since.

No. 8. *Circle on Skelmuir Hill*, the most southerly of the group, now represented by one solitary standing stone.

No. 9. *Circle at Gaval*, mentioned last, because not so ostensibly connected with the group.

This circle was pretty complete about forty years since. The recumbent stone was a prominent object in the field until sixteen years ago, when it was shattered by gunpowder by thoughtless young apprentice masons working in the neighbourhood. A single stone now only remains, spared, as in a former case, to be desecrated as a rubbing stone for cattle.

Referring to the recumbent stones, it may be noted that they are generally flat in the top till towards the western end (No. 4, Loudon excepted), where there is a rise of several inches; that they are not sunk in the ground, but are firmly kept in a position by a simple contrivance—a large stone wedge on the one side within a foot or two of the end, and a similar wedge, but on the opposite side and towards the opposite end, care being seemingly taken to leave an open space between the inner end of the wedge and the stone.

In every case the length of the stone is from E. to W.; and in all cases (save that of Strichen, which is in the north) in the south of the circle.

As to the composition, as before remarked, they consist of whinstone, or highly crystallised gneiss (Strichen again excepted, which is of granite), and were likely derived from the large erratic boulders which probably at one time were strewed thickly over the district—there being yet in some places vast numbers of smaller ones, which are being removed in the process of clearing and enclosing fields of arable land.

With regard to sepulchral remains, either within or in the neighbourhood of the circles, I am not aware that any well-marked traces have been

found. In the case of the Aikey Brae or Parkhouse circle (fig. 6), several years ago, an examination was made by Mr C. Dalrymple and the late Col. Forbes Leslie, accompanied by the proprietor of the land, but

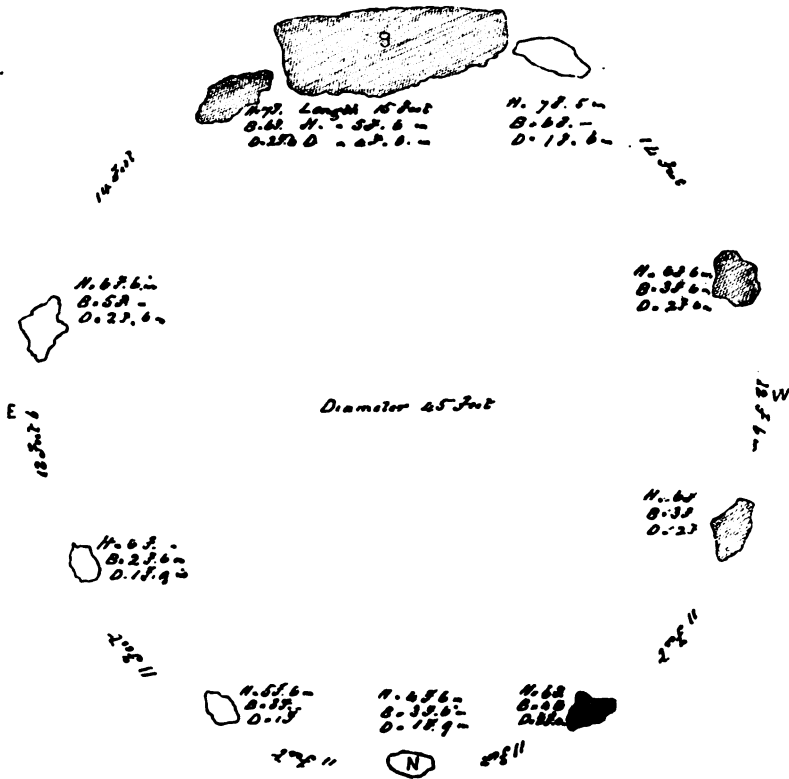


Fig. 6. Ground Plan of the Circle at Aikey Brae (diameter 45 feet).

nothing, I understand, was found except some charred substance a few yards outside the circle; while in the matter of the Gaval circle, when the fragments of the recumbent stone were being cleared off, nothing save a small quantity of black fatty earth was found underneath.

V.

NOTES ON TWO ADDITIONAL RUNIC RISTINGS IN ST MOLIO'S CAVE,
HOLY ISLE, LAMLASH BAY, ISLAND OF ARRAN. BY J. C. ROGER,
F.S.A. Scot.

In a paper by Dr Daniel Wilson, printed in vol. xvii. of the Society's *Proceedings*, p. 52, he refers to me by name as differing from him in regard to his reading of the earliest noted inscription of St Molio's Cave. That is the "Nikulos" risting, which, he concludes, is the only one known to me. "Though the Runic inscriptions of this cave," he says, "cannot compare, either in number or diversity," with those of the Maeshowe tumulus, "they merit greater attention than they have yet received."

In view of these remarks, I submit sketches of two additional ristings in St Molio's Cave, which have apparently escaped the notice of Dr Wilson. They are not given in his recent paper to the Antiquaries, nor are they to be found in either of the two editions of the *Prehistoric Annals*.

The first of these is here represented (fig. 1) to half the size of the original. It reads IOAN-I-URE, the URE apparently a place name. The Runic character representing the letter U is doubtful, the modern Roman letter D having been carved over it. The second is what Professor Stephens reads as a man's name in the nominative case =UEDLUKAR. The KA is a *bind*. It is here represented also to half the size of the original in fig. 2.

A cast of the risting, which Dr Wilson, in his paper to the Antiquaries reads 1Y^44R : (AMUDAR), was submitted by me to Professor Stephens, who confirms Dr Wilson's reading of this name, except that it is in the nominative case, and not, as he supposes, in the genitive. This, at least, is the opinion of Professor Stephens. AMUDAR, the latter explains, is equal to AMUNDAR. The question of AR=the common R, as a nominative singular ending, is treated by Professor Stephens in his *Old Northern Runic Monuments*, vol. iii. p. 143. I should mention

that Professor Stephens reads the former of the two ristings IOAN I URI, not, as I have it, URE. The reason is that the tracing of my original sketch sent him was imperfect, in that I omitted the circular point from the centre of the straight line, which forms the letter E.

In regard to the risting in dispute, I should like to be allowed to place on record the opinion of Professor George Stephens, who in June 1884 wrote me as follows:—"I will add to my *Old Northern Runic Monuments* your explanation, that in the St Molio Cave the word is really *THENE*=this. Of *TH* for *þ* we have Runic examples. I will only



Fig. 1. Runic Inscription in St Molio's Cave. (From a Drawing by J. C. Roger, half size of original.)

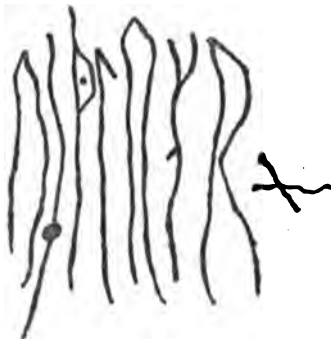


Fig. 2. Runic Inscription in St Molio's Cave. (From a Drawing by J. C. Roger, half size of original.)

mention one. The Northumbrian brooch in my *Old Northern Runic Monuments*, vol. i. p. 386 (p. 125 of my *Hand Book* just published), has the *þ* in the name *ALCFRITH*, spelt with *TH*, not with *þ*, consequently we must read *NIKULOS THIS RISTED* (cut)." I was not aware there were other known examples of deviation from the common rule, but never had the smallest doubt that the intermediate word of the "Nikulos" risting could be anything other than the Norse *thane*. Dr Wilson himself writes me that my cast "will scarcely suffice to convince" him "that any genuine Rune-raister spelled *thane* (*t,h,a,n,e*), and not, as on the *Laws Crescent* plate, and elsewhere, with the *t* and *h* conjoined." It is, however, only fair to add, that this statement was volunteered by

the learned Principal before I communicated to him the substance of Professor Stephens' letter on this subject.

The drawings now submitted are copies of original sketches made by me more than twenty-five years ago, and, so far as my recollection serves, are about the size of the actual risings graven on the rock.

VI.

CAMBUSLANG: SOME NOTES ON ITS EARLY LORDS—THE BARONS OF DRUMSARGARD, AND OTHER LANDOWNERS. BY JOSEPH BAIN, F.S.A. Scot.

The history of this parish, like that of many others, is yet to be written, and now that the public records are being made fully accessible by Government, the materials are gradually gathered for the future historian. Hitherto any one writing on such subjects, especially when treating of the succession to land—always an interesting chapter of parochial history—has been generally obliged to resort for his authorities to old peerage and other books, often full of gross errors.

These reflections occurred to me in lately reading an excellent essay, "Cambuslang, a Sketch of the Place and the People, by J. T. T. Brown, Glasgow, 1884." The account of the early landowners,¹ drawn from Crawford's Peerage (*voce* Bothwell), is however so incorrect, that it is worth while placing the true account from actual record in a connected form.

I do not know what ground Crawford had for saying that Walter Olifard, justiciar of Lothian in the reign of Alexander II., owned the barony of Drumsargard. He no doubt owned the barony of Bothwell, closely adjoining, being only separated by the Clyde and a part of the barony of Blantyre. Bothwell, with many other lands in Scotland, and some in England, was carried by an heiress, probably his daughter or grand-daughter, about the middle of the thirteenth century, into the family of de Moravia or Moray. For in 1293, William of Moray

¹ Pp. 13, 69.

panetarius Scocie, lord of Bothwell, appears in some transactions regarding the churches of Smalham and Walston (*Reg. Glasg.*). He was the heir, and probably the son of Walter of Moray, previous owner of Bothwell, who by a document enrolled in the Public Records¹ had given Derevergulla, widow of David Olifard, the liferent of a manor in Lincolnshire. It may have been a transaction connected with her dower in Bothwell. Hence Crawford's further statement that Drumsargard passed from Walter Olifard, with Bothwell, to the Morays, by marriage with Mary, daughter of Malis Earl of Stratherne, early in the fourteenth century, is quite erroneous. So too is his genealogy of the Lords of Bothwell. He makes Sir William Moray of Bothwell owner of Drumsargard also, and gives him two sons—(1) Sir Andrew Moray, who (he says) was killed at Stirling in 1297 (leaving a son Andrew, the colleague of Wallace, and future regent); and (2) Sir John Moray of Drumsargard. His authority for this being a "MS. history in the hands of Abercairny."

Whereas the real facts about Sir William Moray of Bothwell are—that he did homage to Edward I. in 1291 and 1296, was forfeited for having been in arms against him, and died a prisoner on parole in England before November 1300, *without heirs of his body*. That he had a younger brother, Sir Andrew, who died shortly before him, and a nephew Andrew, the son of this last, who was killed at Stirling in 1297. The son of this younger Andrew, a posthumous child also named Andrew, was at Whitsunday 1300 only two years old. *He* was the heir of Bothwell, the future regent, and brother-in-law of Robert Bruce, and with his descendants, Bothwell remained till appropriated, there is not much doubt, in some illegal way, by Archibald Douglas, lord of Galloway, about 1361, or soon after.²

Reverting to Drumsargard, there was no Sir "John" Moray, as stated by Crawford. But Sir "William" Moray of Drumsargard was contemporary with, and distinct from Sir William of Bothwell. He appears

¹ *Calendar of Documents (Scotland)*, vol. ii. No. 725.

² If the Papal records are correct, this barony was carried off from its right heirs, by marriage of the *widow*, not the *daughter* of Thomas Moray, last of the direct line. (*Theiner's Vetera Monumenta*.)

on the Ragman Roll in 1296, and can be identified by his seal, still existing—three mullets, 2 and 1, on a shield, with a rose at either side, perhaps for difference. And after making peace with Edward I. (for he too had taken arms), he had a writ from the English Chancery on 20th March 1303–4, to get back some lands in Northumberland. He thus survived Sir William of Bothwell by at least three years—how much longer I do not know. The next lord of Drumsargard appears to be John Moray, who is said, by Nisbet,¹ to have granted a charter of the barony of Ballencrieff in favour of his future wife Mary, daughter of Malise, Earl of Stratherne. This deed appears to have no date; but as Ballencrieff belonged to Sir Henry Pinkeny (brother of a claimant to the Crown), probably till Bannockburn, it may have been confiscated by Bruce about that time and given to this John Moray. Maurice Moray, perhaps the son of John, was owner of part of Ballencrieff about 1335,² probably the same person as Maurice Moray of Drumsargard, who became Earl of Stratherne, and fell at the battle of Neville's Cross or Durham in 1346.

In the reign of Robert II. (1371–1390) two lords of Drumsargard are recorded,—Walter Moray, to whom that king grants a charter of Ardromy, in the barony of Banff, Perthshire (Robertson, *Index*, p. 117, No. 74); and Alexander Moray, who in 1375 entered into an indenture with Eupheme Ross, the queen, and her son David, for their assistance to enable him to recover his inheritance (hereditas). This deed is quoted in Crawford's *Peerage* (p. 42), as among the Abercairney charters. Mr Riddell, who notices it in his *Stewartiana* (p. 89), ridicules the notion that this "inheritance" was Bothwell. But he was then advocating the claim of another branch of the Morays to the chiefship of Bothwell, and besides was not aware that Drumsargard was a distinct house before 1296, and must therefore have come off the main stock several generations earlier than was known, till the late republication of the Ragman Roll in connection with the yet existing seals.

At this point—the last quarter of the fourteenth century—I can trace the possessors of Drumsargard with no certainty for a generation. It

¹ *Heraldry*, vol. i. p. 253.

² Original Roll of Exchequer (Public Record Office).

could not have come into the possession of the Douglasses in 1370, by marriage of Archibald the Grim, and Johanna, daughter (or widow) of Thomas Moray of Bothwell.¹ The Douglasses probably got possession of it in some irregular fashion, somewhat later, during the weak reign of Robert III. The first notice I see of their ownership, is a charter by Archibald, fourth Earl of Douglas, to John of Park and Janet Chisholme his wife, of the lands of Gilbertfield, in the barony of Drumsargard. It has no date, but is granted at his Castle of Bothwell. Andrew Stuart, who found it in the charter chest of his relatives the Stuarts of Castlemilk (*History* p. 324), considered it to have been granted about 1411. The Earl was made prisoner at Homildon in September 1402, and was kept in England, with short intervals, for nine or ten years, and it may have been granted during one of these intervals.² The Douglasses held the barony till they were forfeited in 1455, when James, first Lord Hamilton, obtained it,³ and with the Hamilton family it still remains.

Before adverting to the lands outside of the barony, it may be remarked, that so early as 1296, one small freeholder existed in Cambuslang, who has hitherto escaped notice. This was "Hugh Croket of Kameslank,"⁴ who appears on the Ragman Roll with others of Lanarkshire. His seal, with the punning device of a squirrel eating, is still preserved. Hugh is certainly the earliest known freeholder of the barony, and it is very likely that the tenement of "Crookedshield" within it took its name from him. A William Croket, of the adjoining parish of Kilbride, also appears on the roll. His seal is also still preserved.

Besides these feus of Gilbertfield and Crookedshields, the next in point of antiquity is Lethrig or Lettrick. Sir John of St Clair, lord of Lethrig, is a witness to a charter by Archibald, Earl of Douglas, granted at Edinburgh in 12th March 1420-21, in favour of Archibald of Hepburn, brother german of Adam of Hepburn, lord of Hales, of

¹ As stated in *Essay on Cambuslang*, p. 69.

² This deed may probably have got into the Castlemilk papers for this reason. Archibald Douglas, the previous Earl, was owner of the barony of Carmunnock, which adjoins Drumsargard on the south-west, in 1388 (Exchequer Rolls).

³ *Reg. Mag. Sig.*, vol. ii. No. 601.

⁴ A spelling closely resembling the local pronunciation of the word.

the lands of Flemington, in the barony of Drumsargard. In later times several of these feus, with other parts of the barony, *e.g.*, Newton, Westburn, Greenlees, Spital, &c., were granted to cadets of the Hamilton family; but I believe all have reverted to the Duke by purchase or otherwise, except Newton and Spital, the former belonging to Mr Hamilton Montgomery, the latter to the family of Jackson, old feuars in the adjoining barony of Blantyre.

The other estate forming the remainder of the modern parish, but not within the barony, cannot be traced quite so far back. This is Coats *alias* Nobles-farm, a £5 land of old extent, in one place called the East Ferme of Rutherglen. This is in the Register of Paisley (p. 107), where it is said that Master John of Merton, rector of Cambuslang in 1394, had ineffectually claimed the tithes as a pertinent of the chapel of the B.V. Mary of Cambuslang. This evidently refers to the foundation (or augmentation) of a previous rector, William of Monypeny, who mortified an annualrent of 6 marks which he had acquired from Sir William of Dalyelle, knight, charged on the above estate, for a chaplain celebrating in the said chapel. Crawford (*Remarks on Ragman Roll*) says that in 1467 a family called Noble had a charter of these lands. James V. confirmed on 14th July 1537 a charter by James Nobill of Nobillis-ferme, in favour of Walter Crawford of Ferme, and Mariota Maxwell his wife, of his land of Nobillis-ferme, *vic.* Lanark, the reddendo being 6 marks yearly of blench farm to the chaplain of the B.V. Mary of Nobillis-ferme. (*Reg. Mag. Sig.*, vol. ii. new edition. No. 1688.) They subsequently passed with an heiress, Christian Craufurd, shortly after 1600, to her husband Sir Walter Stewart of Mynto, and remained with that family for fifty or sixty years, when they were sold to the Hamilton family, who still possess them. It seems more than probable that they were originally part of the parish of Rutherglen, and have been at some date now unknown disjoined from it and added to Cambuslang. Even now a part of the boundary of these two parishes is not properly defined for a considerable distance. A glance at Forrest's excellent map of the county of Lanark shows that the barony of Drumsargard has a well-defined water boundary at nearly all the points of the compass; while Coats, without a single natural

boundary except where it touches Drumsargard, has quite the look of a piece cut out of the parish of Rutherglen. I feel much inclined to think that originally, the barony of Drumsargard and the parish of Cambuslang were co-extensive, notwithstanding some opinions to the contrary.

With a word or two on the origin of the name I may close. Though no Gaelic scholar, the derivation given in the old Statistical Account as the "ridge of the parched height," is far inferior, in a common-sense point of view, to Druim-sagart—"the priest's hill," which I see is the one favoured by the Rev. Mr Blair, the parish minister of Cambuslang. No one who knows the place can fail to see its appropriateness. On the gentle slopes surrounding the mound on which the old Castle once stood, the people of the district could with ease witness the rites of a worship doubtless older than Christianity; and St Cadoc, said to have been the first Christian missionary, may very likely have as usual adopted the spot where the pagans worshipped, till the lord of the land provided him or his successors with the site where a church has stood for centuries, the Kirk-hill of Cambuslang.

VII.

NOTE OF EXCAVATIONS AND DISCOVERIES ON THE TAFTS OF
BAYANN, BELOW SELLAFIRTH, ON BASTAVOE, YELL, SHETLAND.
By JAMES T. IRVINE, F.S.A. Scot.

On the point of land west of the present house of Bayann, and below Sellafirth, about the period between the years 1833-35, some ancient remains came to light at a spot called the "Tafts" (*i.e.*, the Seats), stones being known to be loosely lying in the cultivated riggs above the brow of the cliff. Mr John Hoseason of Bayann commenced to win stones from here to build a new farm-house across the burn of Leoygie, and also to form a stone beach below the banks, on which to dry salt fish from Gloup fishing station. When his workmen began to raise these stones, many were discovered to be old knocking stones for husking bere; while below others, which were placed in a circle, were found stone

knives, some of which were of an unusual shape, being (so far as the writer's memory goes in the case of one he saw) of a roughly triangular form with a small round hole perforated in one corner, the hole being evidently for a string to pass through. This specimen went afterwards to England. I have never heard of knives of this description having been found anywhere else in Shetland. No care of the remains was taken, nor was there any one on the spot who took special interest in such discoveries. Several of the knocking-stones remained in the constructed beach for years afterwards and may still be there. The writer's remembrance is but from a single casual visit to the place as a boy while the excavations were going on. Fortunately he has been able to obtain an account by another who saw the excavations about the same time.

Miss Margaret B. Jamieson, in a letter to me dated 1st August 1883, states that she remembers very well the finding of these objects, though she was but a child at the time. The men came on a number of stones of a hard quality that had been hollowed out like the old Shetland knocking-stones for shelling or husking the bere which was used instead of pot-barley, a luxury unknown to the poor in those days. The hollows in these stones, however, were different from the common form of the knocking-stone, inasmuch as they were oblong instead of being circular in outline. There were also two large quern stones found standing on their edges. Among the stones large quantities of ashes and a considerable number of human bones were found, and a large bank of shells has since been laid open by the inroads of the sea at the same spot. Similar remains were also found opposite the Tafts, at a place called "The Whumblins of Cunnister," where there seems also to have been a group of ancient buildings, though no one showed sufficient interest in them to collect any of the relics.

It may not be uninteresting at the same time to place on record the following memorandum of the occurrence of ancient remains at Norwick in Unst. Mr John Henderson, in a letter to me dated at Norwick, 17th February 1885, states that he lives at the place which is marked on the map as the "Ruins of Bartle's Kirk," and that the site abounds in broken remains of vessels of pottery and stone implements, but he has never seen an entire specimen of either sort. A year or two ago there

was a stone coffin found about two feet under the surface, formed of five slabs, the lid being away, and the cavity measuring little over two feet square. In the bottom there was a thin layer of a brownish stuff resembling ashes. About four yards S.S.W. from it there was a stone about 4 feet in length and 9 inches in diameter, standing on its end with its top near the surface. The lower end of this long stone rested on a flat slab, underneath which was a layer of clay in which the prints of two human feet were distinctly visible. The footmarks were about 10 inches in length and very broad in proportion, from which it was evident that the feet which made them had never been confined in shoes.

In some MS. memoranda by the late Thomas Irvine of Midbrake, there is the following entry regarding Norwick:—"Kirk at Norwick, dedicated to St John, probably one of the earliest built in the country. About two or three feet high of the walls, and an arch which spanned the middle of the building (a very picturesque object), were standing in 1822. The Rev. Mr William Archibald, I believe, preached in it. Some cross-headed grave-stones are in the churchyard. A ruin called Bartle's Kirk is on the north side of the Burn of Troal below Vellie, probably dedicated to St Bartholomew, and locally said to have been built on the site of a heathen temple. The old manse and glebe of Unst was at Norwick, and was called 'Virse.'"

VIII.

NOTICE OF PHOTOGRAPHS OF INDIAN ROCK-INSRIPTIONS,
AMAZONAS, BRAZIL. BY PROFESSOR DUNS, D.D., F.S.A. Scot.

The fourteen sets of photographs now on the table, together with a work entitled *Do Rio Janeiro ao Amazonas e Alto Madeira*, were recently presented to the Society, through R. H. Gunning, Esq. M.D., F.S.A. Scot., by Dr Morsing, M.I.C.E., member of the Instituto Polytechnico Brasilino—a gentleman who has recently been elected a Corresponding Member of the Society. The collection of photographs was made by Dr Morsing, as engineer-in-chief of the Commission for the Survey of the proposed route for the Madeira and Marmore railway. In forwarding them to Dr Gunning, Dr Morsing says:—"By looking carefully at the photographs, you will see that the names of the Brazilian naval officers, Schaw, Bessa, Laurindo, and Barbosa appear very often. The reason is that they made the drawings of these inscriptions when they were by Government orders sent up these rivers on scientific explorations. As a general rule, the inscriptions have a depth of $\frac{1}{4}$ of an inch, by $\frac{1}{2}$ an inch in width, with the edges rounded, showing great age." The mode of copying them was, by one man holding a paper firmly against the rock, while another followed the inscription with the tip of the forefinger of the left hand, and with the other hand used a piece of charcoal in tracing the depression made, "obtaining in this way an exact copy." The draftsman and photographer of the Survey party, Camillo Vedani, then made drawings from the rubbings, and with the utmost care and exactness reduced the drawings to a small scale, and afterwards photographed them. "These details account for the fineness of the lines in all the figures. During seven months of the year these inscriptions are under water, and the Indians during the floods keep in the forest, and only come to the river banks when the waters are low, and fish, &c., have left the large lakes and lagoons in the interior." It is to be hoped that the original rubbings have found a place in the Rio de Janeiro Museum, as it would be interesting to

see the effects of water-wear and weathering in connection with the exceptional position of these incised sculptures. Much, of course, will depend on the lithological character of the rocks. In Franz Keller's able work, *The Amazon and Madeira Rivers*, London, 1874, references are made to rock-inscriptions in the same localities, and details are given which shed some light on these now before us. He says:—"On one of these islands (in the Madeira river), with the aid of a lantern, I discovered, when preparing to take astronomical observations, some flatly incised designs, some of them spiral lines and others semicircular, on the dark brown polished surface of several vertically poised slabs of rocks, the largest of which was 2 metres in height, with a breadth and thickness of $1\frac{1}{2}$ metre. The figures, two or three centimetres high, were excised only 3 or 4 millimetres deep." Again, farther up the river—"I found in climbing over the rocks of the right shore another written-rock covered with spiral lines, and concentric rings evenly carved in the black gneiss-like material, and similar to those of the Caldeirão. . . . A dark brown coat of glaze, found everywhere on the surface of the stones laved by the water, covers the black so uniformly, as well on the concave glyphs as on the parts untouched by the instrument, that many ages must have elapsed since some patient Indian spent long hours in cutting them out with his quartz chisel." Keller asks, Can these inscriptions have been made by the ancient Incas of Peru in some conquering expedition? He thinks it little probable that a rude nation of hunters, like the forefathers of the Caripunas, would spend months in incising these figures. It will be seen that the drawing from Keller, now shown, gives a much better idea of the appearance *in situ* of these sculptures than the photographs. Twelve of the photographs are devoted to the rock-inscriptions. These may be arranged under seven groups—A, including sets 1 and 2; B, 3 to 6; C, 7 and 8; D, 9; E, 10; F, 11; and G, 12. Six of these, A to F, refer to individual localities; G contains examples from several different places (see the accompanying figs. 1, 2, 3, 4, 5, 6, for examples from these groups).¹

¹ The references are to illustrate *groups* of specimens of these rock-inscriptions, rather than single examples. When particular objects are noticed they will be found in the group referred to.

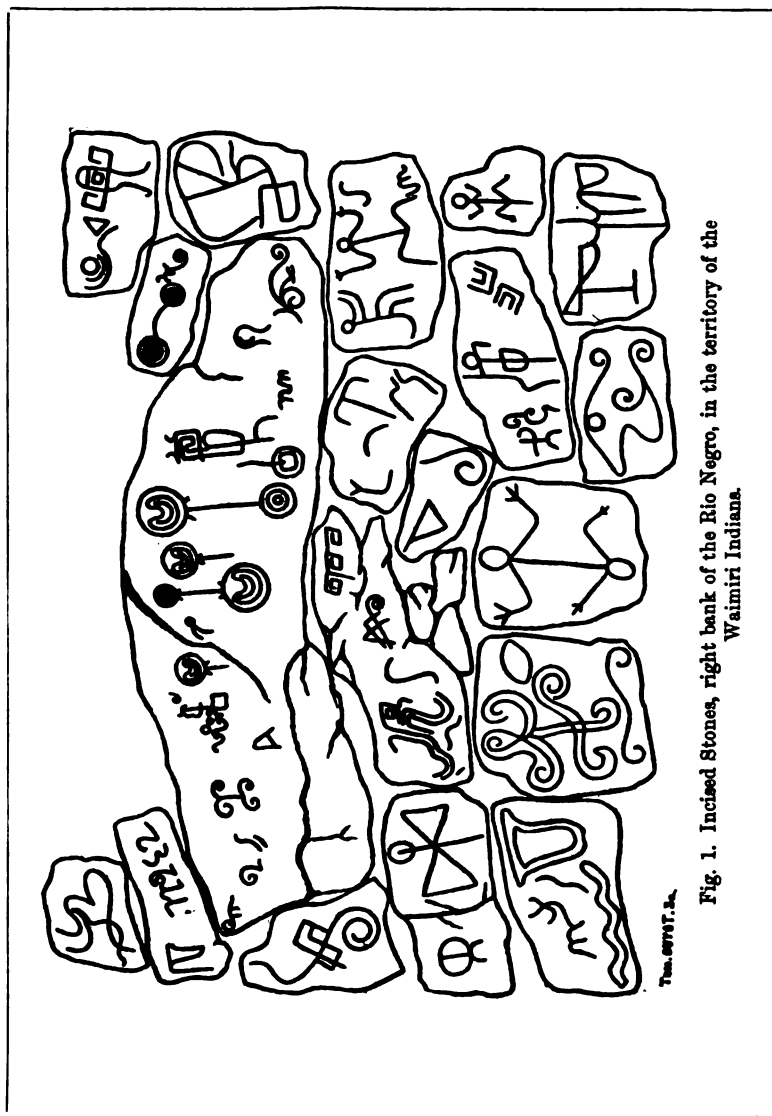


Fig. 1. Incised Stones, right bank of the Rio Negro, in the territory of the Waimiri Indians.

The literature of this subject is yearly growing. Recent anthropology recognises the value of materials for which it is increasingly being indebted to archæology, even as the latter does the value of the records

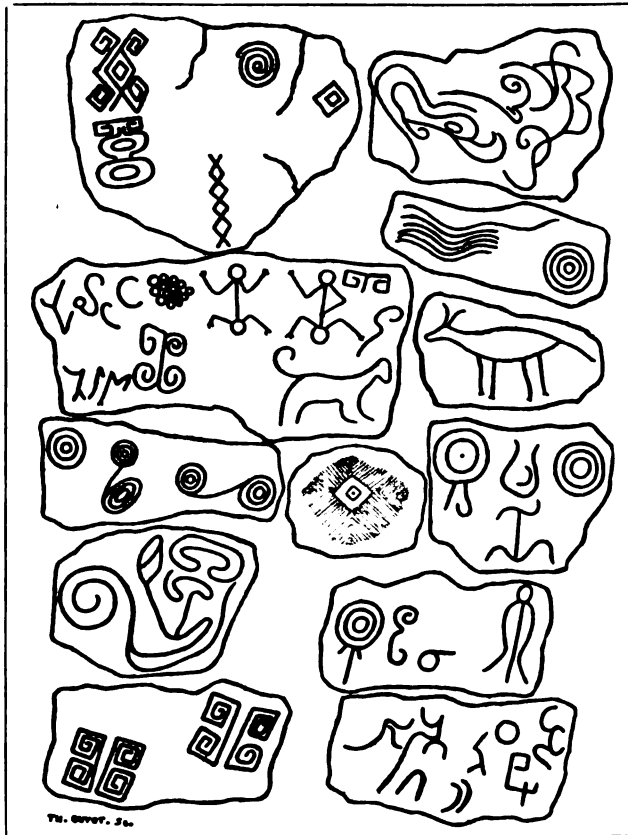


Fig. 2. Incised Stones, right bank of the Rio Negro, in the territory of the Waimiri Indians.

of travel, with their rapidly accumulating references to the industrial and other remains of extinct savage tribes, and to the weapons, implements, utensils, and habits of existing tribes. Under the terms,

"written-rocks," "pictographs," "picture-writing," "rock-inscriptions," "rock-ideographs," we have much material—*materia rudis, chaos informe*—waiting for differentiation. Any attempt to face this, even though it

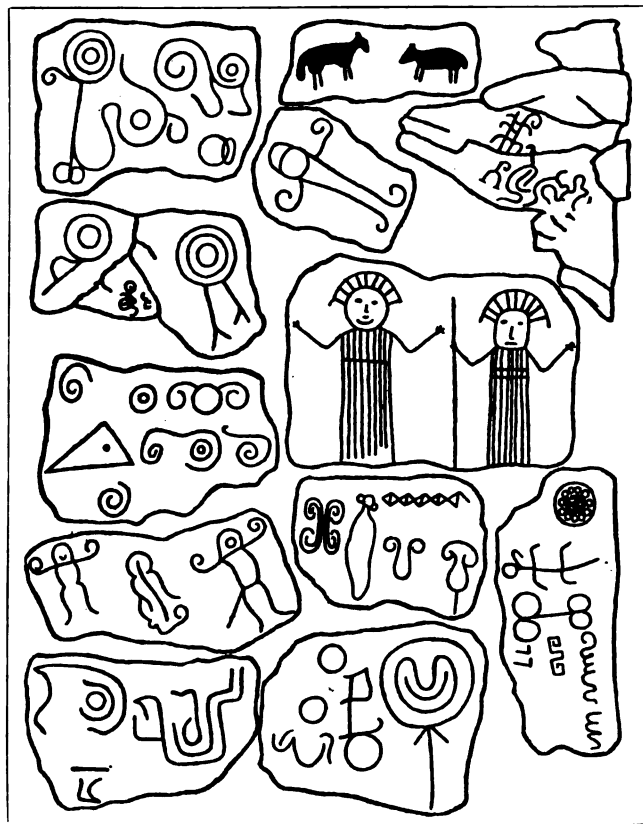


Fig. 3. Incised Stones, right bank of the Rio Negro, in the territory of the Waimiri Indians.

gets no farther than the recognition of its existence, is not without use. The very wide geographical distribution of these inscriptions is seen, when it is remembered that they occur in Continental Europe, the

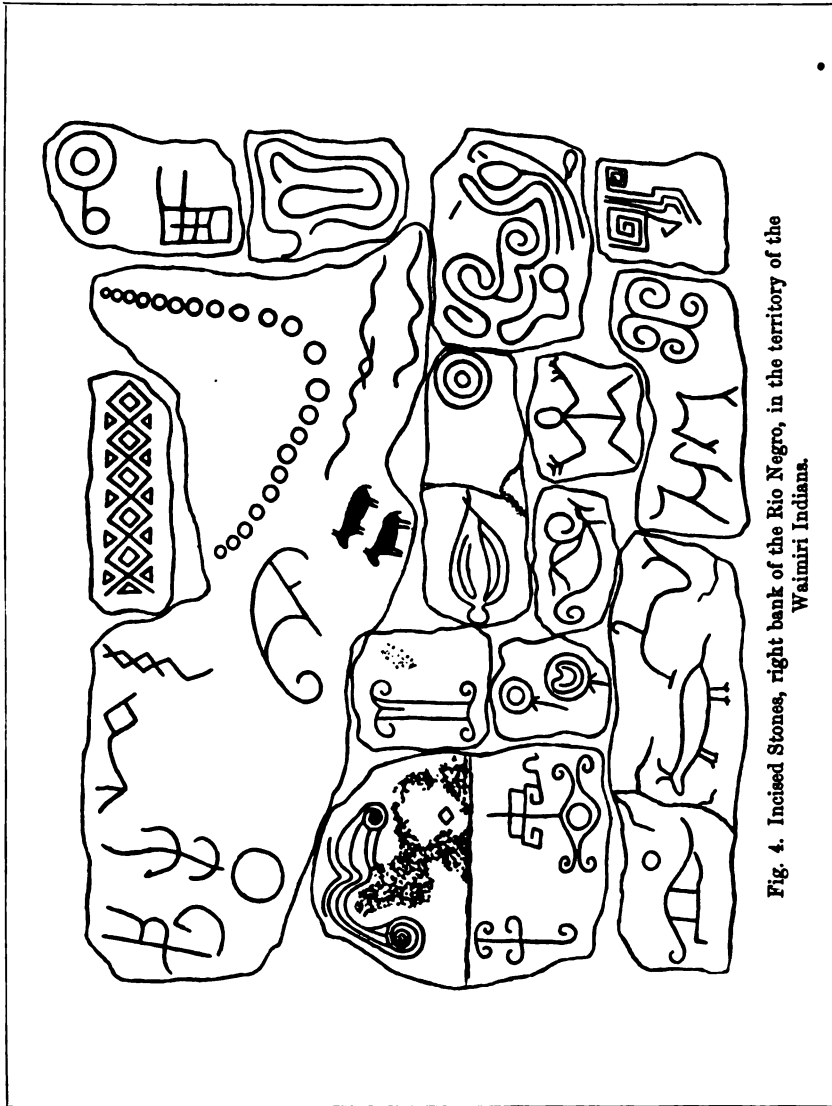


Fig. 4. Incised Stones, right bank of the Rio Negro, in the territory of the Waimiri Indians.

British Isles, Palestine, Arabia, India, Ceylon, the Andaman Islands, the Nicobar Islands, Japan, North and South America, Africa, Australia, New Zealand, New Guinea, Fiji, &c., and that all have some figures common to each. What is the significance of this? Does it shed light on the question of the unity of the human race? Will it help the anthropologist in tracing the leading tribal differentiations of the race

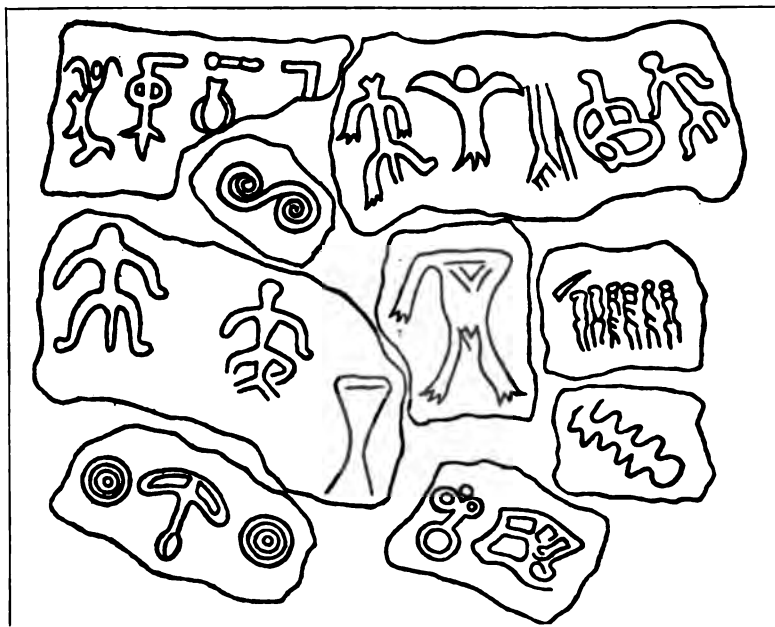


Fig. 5. Incised Stones from Tavarete, Rio Waupes.

up to one great group? Does it point to migrations of the chief families of mankind, and does it help to track the path of these? Do the pictographs of New Zealand, the cave-pictures of the Bushmen, or the written-rocks of North and South America, countenance the theory that their authors were men whose fathers had been in contact with a higher condition of civilisation? And when to these questions we add others, even more formidable, touching the age of the writing and

its alleged developmental stages, we can understand how wide the sphere is within which hypothesis may have free and unlimited sweep. Nevertheless, a comparative view of the materials even now within



Fig. 6. Incised Stones of Moura.

reach, reveals data which warrant inductions of great anthropological interest. As, for example, that the gift of language does not lie in the language formed, but in the power to form it: that where within

one area, as say Brazil, the dialects are as numerous as the tribes, if the same root elements are found in all, there is *prima facie* evidence of original family unity : and that while the characteristic forces which led to the formation of special tribes may be lost, they may yet have been similar to those of which we have historical proofs in other areas.

Ascribing a linguistic value to the pictographs and incised characters in rocks, they are appealed to in support of two theories—the autochthonic theory of origin and the theory of immigration from distant centres—which opens a wide field of discussion. I refer to them only as they are linked with the rock-inscriptions. The former regarded from a purely scientific point of view seems to me reached by a process which itself is purely speculative. The occurrence of figures of animals on the rocks, or of representatives of sun, moon, stars, clouds, rain, &c., and last, of signs clearly derived from them (figs. as above), is held to point to three stages of development—animal-worship (*zoötheism*), nature-worship (*physisitism*), and spirit-worship (*polytheism* leading to *monotheism*), which finds expression in written language. The scheme violates the first principles of scientific method, and ignores a multitude of facts where historical authenticity is beyond question. The immigration theory is the favourite one in Brazil. In forwarding the photographs, Dr Gunning remarks :—“Dr Morsing’s letter to me, and the book will help members of the Society to understand the inscriptions which seem to support the theory of an Oriental immigration to Mexico, Peru, and the Amazon region.” No doubt, this theory can appeal to many facts, but it is doubtful if these warrant any sharply defined inferences as to the starting-point and ultimate course of the migration. Should the rock-incised figures of animals, natural objects, and signs be ultimately found to have a true linguistic value, it might come to be possible to determine the centre from which the Redskins started, and the course by which they reached their present areas ; but materials are not yet in hand for this, though many hold that these signs and symbols bear the clearest resemblance to letters in eastern and north-eastern Asiatic alphabets. Some even find the starting-point of the early western civilisation in the South American continent. Thus the Abbe Brasseur de Bourbourg points to the Maya alphabets of

Yucatan and the Quiché of Guatemala as containing the primitive forms of Greek and Latin letters! Light, however, is gradually gathering round the matter. American ethnologists are making good use of intelligent members of existing Indian tribes, by getting from them the meaning of pictographs and inscriptions still current among them, and by employing their knowledge of these as keys to more ancient forms. Much has already been done by such men as Eliot (1666), Schoolcraft, Squier, Stephens, Ludwig, F. Müller, Hind, Powell, Holding, Mallery, A. H. Keane, and others. The names imply a division of labour, by the continuance of which alone we may hope for substantial scientific points in the future. The field is so very wide that no one's life would be long enough for an exhaustive survey. Keane gives a list of 1700 historical Indian tribes, each of which has its own linguistic idiom ("Appendix to Bates' Central and South America," in Stanford's *Compendium of Geography and Travel*, 1882). In addition to all this the polysynthetic character of many if not all of the dialects presents formidable difficulties from which monosyllabic and polysyllabic languages are free. Polysynthesis implies the presence of several ideas, and even, perhaps, the association of several shades of meaning with the same ideas, all thrown into one polysyllabic term pronounced as one word. And this system enters into symbol writing. Keane gives an example from the Iroquois. Their word for wine is "*oneharadeschoengtseragherie*," the ideas included being "a liquor, made of the juice of the grape," whose symbol might have been a linear finger and thumb pressing a vine berry, only the indication of man's agency in the preparation would have added several syllables to the word! Now it is here that some of the difficulties of the Oriental immigration theory emerge. For example, the Eskimo dialects present such words as "*sanigikeiniariartokasuaromaryotittogog*," where polysynthesis, as Keane remarks, links the Eskimo with purely American tribes. But the Innuït dialects of Asia are closely related to the Eskimo, and Keane (*ut supra*) thinks they "imply rather an Eskimo migration westwards than an Asiatic migration eastwards." Over and above all this, it is now known that, as with the Egyptian *homophones*, the same idea may be represented by more than one symbol. This introduces other elements of uncertainty.

The fruits of a painstaking examination of the Brazilian photographs, and a careful comparison of the figures with those of written rocks and rock pictographs in other localities, are not very substantial, unless, indeed, some value be attached to the feeling that in the face of much temptation to theorise the temptation has been resisted. Looking at the spirals (fig. 2), circles (figs. 2, 5), maze-like figures (figs. 2, 3, 4, 5), spectacle-like ornaments (fig. 1), cups, arrows, lines waved, twisted, straight, or oblique, it was hardly to be expected that there would be none to remind one of the pictographs of South Africa and New Zealand, the incised stones of North America, the Sinaitic inscriptions, and even the rock sculptures of Northumberland and Fife. And so in regard to letter-like characters (figs. 1-4), if we keep firmly in mind that resemblance more or less marked is not identity, we might point out the likeness of many of the forms on the Brazilian rocks to those on the rocks of the Wady Mukatteb, on Punic and Himyaritic coins, on the Moabite stone, or among the Egyptian hieroglyphs, without postulating an Oriental immigration for all the South American Indian tribes—just as the resemblance of several of these to Runic and to English characters is not sufficient to warrant the theory of an immigration from North Europe. With regard to the figures from Keller, the same remarks might be made. Corresponding circles occur in Punic inscriptions, the oblong figure with the perpendicular bar is met with in the enchorial, or writing of the common people, at Nimroud, the double eyeglass-like object is often represented in the Wady Mukatteb inscriptions, and the three strokes on each side of the segment of the circle have a strong resemblance to hieroglyphic numerals, according to which each three would represent 10,000 and 2. With even a very feeble fancy, interpretations of this sort are easily within reach.

To return to the photographs. Three priest-like persons (fig. 3) are figured in flowing robes and with a glory round the head. One of these has five fingers on the left hand and four on the right. The other has the normal number on both hands. But in all the other hands shown in the different groups, the number of fingers is three. Examples of geometric ornamentation are represented in figs. 1, 2, 4.

In set 8, group C, there are sixteen rude representations of human heads formed by straight lines; and in set 10, group E, there are about thirty, but these are all formed by curved lines. In set 11, group F, there is a figure with round human head, and long, trailing, worm-like body (fig. 6). Is this the fabulous *Minhocão* (big-worm), the Lorelei of the Rio Negro? The representatives of animals include three or four of the peccary (?) (figs. 3, 4)—one of the jaguar (fig. 2), monkeys (fig. 1), one bird, serpents, beetles, mantis, and walking-stick insects (*Phasma*). But there are no ant-eaters, no sloths, alligators, turtles, nor fishes. With only two doubtful exceptions, there are no figures of plants. Perhaps these omissions tell in favour of the symbol-writing hypothesis. A similar eclecticism was practised in Egypt. Many of the best known animals of that country have no place in the Egyptian monuments. But while giving full expression to all the elements of the uncertainty indicated above, there yet seems to be data for assigning to the South American Indian "rock-writing" a literary value. And if so, we may cherish the hope, that by the discovery of a key to them, like what the Rosetta stone was to the hieroglyphics of Egypt, the beasts and birds and material objects will yet be found to represent "the sounds of language and the expression of thoughts."

IX.

NOTES ON ORMOND OR AVOCH CASTLE, IN THE BLACK ISLE, ROSS-SHIRE, WITH A PLAN AND SECTION; AND NOTICE (WITH DRAWINGS) OF BRONZE CELTS FOUND IN ITS VICINITY. BY ANGUS J. BEATON, C.E., F.S.A. SCOT., BANGOR, NORTH WALES.

Ormond or Lady Hill lies on the east side of the northern shore of the Inverness Firth, and midway between Inverness and Fortrose, forming one of the headlands which guard the entrance to the Bay of Munloch. The highest point of the hill is 390 feet, but the knoll on its eastern shoulder, on which the castle stood, is only 200 feet above sea-level.

The castle is supposed to have been one of the royal erections built in the twelfth century, to keep in check the disloyal inhabitants of the district. We find it chronicled that in 1179 King William the Lion erected two castles in the lordship of Ardmanach [the Black Isle]; one of these was Redcastle, and Ormond Castle is supposed to be the other.

The ancient name of Redcastle was Eddyrdor. In 1278 it was in possession of Sir Andrew de Boscho and his wife Elizabeth, and they paid two merks yearly to the monks of Beaulieu at their Castle of Eddirdivar. In 1230 it belonged to Sir John Bisset, who built the Beaulieu Priory. In 1455 the Barony of Edderdail and the Red Castle, with the lordships of Ross belonging thereto, were annexed to the Crown by James II.; and in 1481 (5th April) James III. granted to his second son, the Marquis of Ormond, the lands of the lordship of Ardmannache, called Avauch, and Netherdale, with the moot hill of Ormond and the castle and fortalice of Redcastle. The building of Redcastle is considerably modernised, and so much changed that its original form can now be only conjectured. Mr Alexander Ross, architect, referring to it at a meeting of the Inverness Field Club, says:—"It appears to me that the oldest portion is the south front overlooking the firth, and that it constituted the keep or main tower; the east and south fronts seem to form two sides of a pentagon, which may have been the form of the great enclosure, a plan not uncommon in our Highland castles."

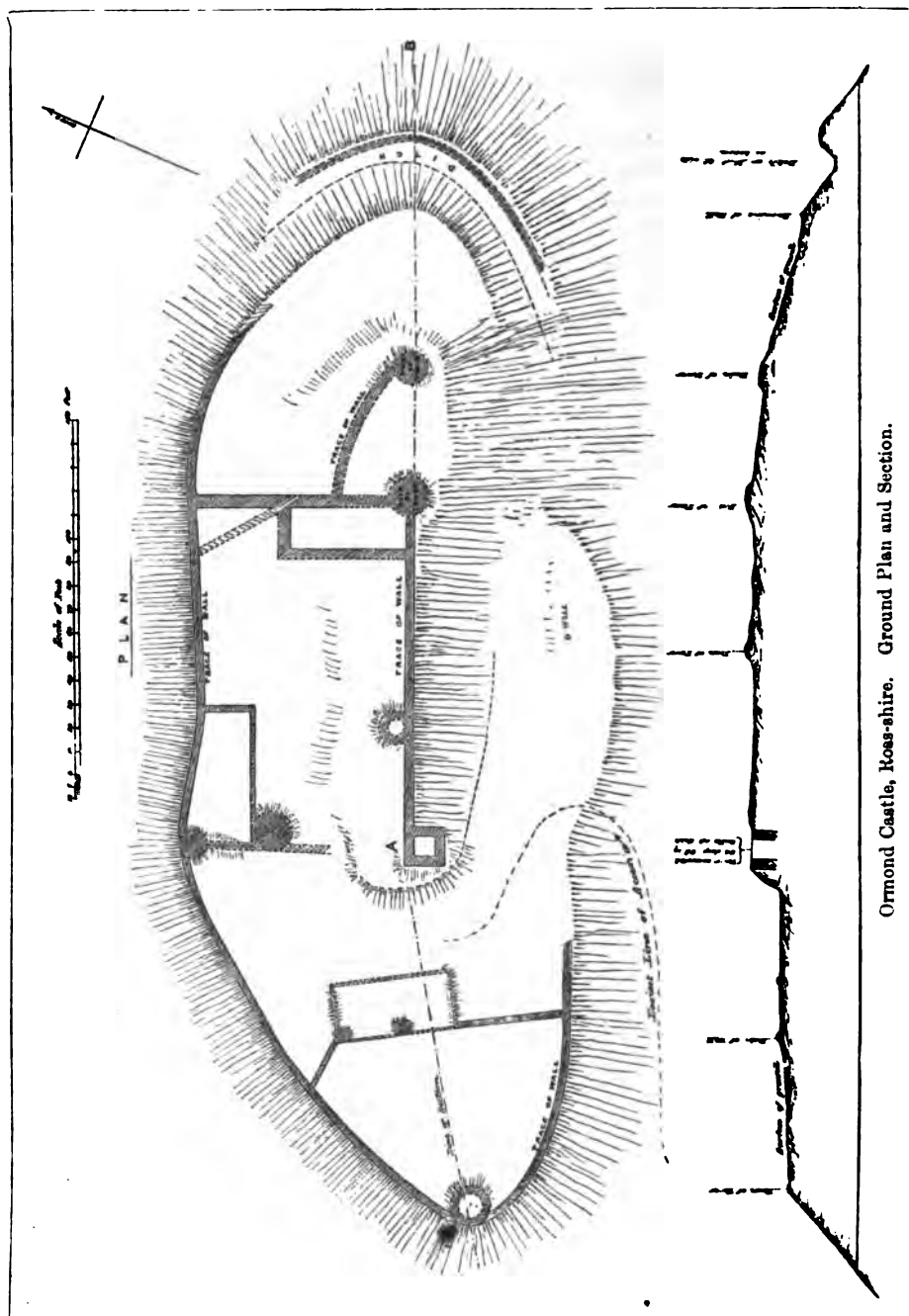
In the *Origines Parochiales Scotiæ* we have the following :—"From the Castle of Avoch, known as the Castle of Ormond, Ormondry or Ormond Hill and Douglas Castle, Hugh of Douglas, between 1440 and 1448, drew the style of Earl of Ormond; and James Stewart, the second son of King James III., between 1460 and 1481, drew the style of Marquis of Ormond. In 1481, as we have seen, King James III. granted the lands of Avauch, with the moot-hill of Ormond, to the Marquis of Ormond, who about 1503 resigned the lands, but retained the moot-hill in order to preserve his title."

A writer of the seventeenth century mentions "Ormond Hill southward from the church [of Avoch], with the remains of a castle," and elsewhere describes it as "Castletown, with the ruynes of a castle called the Castle of Ormond, which hath given style to sundrie earls, and last to the princes of Scotland." The foundations of the Castle remain on the top of a hill near Castletown Point, on the Bay of Munlochry, about 200 feet above the level of the sea. They occupy a space 350 feet by 160 feet, and the castle seems to have been built of coarse red sandstone and lime, with a ditch on one side. The Hill of Castletown is now known as Ormond Hill or Ladyhill,—the latter name having arisen evidently from the dedication of its chapel.

The following is an extract quoted in Anderson's *Guide to the Highlands*.—

"On a rocky mound called 'Ormond' or 'Ladyhill,' stood the ancient Castle of Avoch, to which, as related by Wyntoun, the Regent, Sir Andrew de Moravia, retired from the fatigues of war, and ended his days about the year 1338, and was buried in the 'Cathedral Kirk of Rosemarkin.'¹ Passing afterwards into the possession of the Earls of Ross, this castle was, on their forfeiture in 1476, annexed to the Crown, when James the Third created his second son Duke of Ross, Marquis of

¹ See Fraser-Tytler's *History of Scotland*, vol. ii. p. 65. It appears strange that no trace of Regent Moray's grave has been discovered about the cathedral tombs of Fortrose. There are three tombs built under the arches of the remaining aisle, one of which is regarded as being the tomb of a Countess of Ross, supposed to have been the foundress of the church; the other as of its first bishop, and probably the remains of the third may have held the Regent.



Ormond, and Earl of Edirdal, otherwise called Ardmanache; and hence this district, which still bears these names, thus became one of the regular appanages of the royal family of Scotland."¹

This annexation in the time of James II. was repeated and confirmed by the whole Parliament on 1st July 1476, in favour of James III., who afterwards, on 29th January 1487, created his second son Duke of Ross, *Marquis of Ormond*, and Earl of Edirdale otherwise called Ardmanache or the Black Isle;² from which period the lordship of Ardmanache was generally considered as part of the patrimony of the king's second son (*Acts of Scot. Parliament*, Thomson's folio edition, pp. 42, 113, and 181).

In October 1883 I made a survey of the top of Ormond Hill and the ruins of the castle, but, notwithstanding the assistance of several men, kindly sent by Mr Fletcher of Rosehaugh for excavating, the amount of débris requiring removal was so great, that we only succeeded in clearing one tower, marked A on plan. I therefore experienced great difficulty in tracing the original outline as shown on the annexed plan (see fig.); the walls being so much overgrown with turf, the whole area must needs be excavated to obtain a thoroughly reliable ground plan. So far as measured, we found pretty well-defined traces of walls; but the towers, which now appear as circular, may prove to be square when cleared out, as did the one at A on the plan, which presented a circular appearance before being cleared out, but when dug to a depth of 6 feet revealed an inside opening 9 feet square, with substantially built walls in sandstone and mortar, 4 feet thick. In this tower we found a very fine sandstone door rybat, with the "droving" or chisel marks distinctly clear. This stone is now in the possession of Mr Douglas Fletcher at Rosehaugh House.

The plan indicates that the castle was of an oval form, following the

¹ The earldom of Ross and lordship of Ardmanoch are appointed to be the patrimony of the king's second son, James VI., par. 11, cap. 30.

² The original appellation of the Black Isle was Edderdail, or the land between the two arms of the sea; some think that this name in course of time might become corrupted to "Ellandhu," which is the Gaelic for Black Isle. "Ardmanach" signifies a height in the middle, and "Ardmanach" the land or territory of the monks.—See *Proc. Soc. Antiq. Scot.*, June 1883, p. 477.

contour of the hill, similar in outline to many ancient places of defence. The summit of the hill is moderately flat, so far as occupied by the castle, and showing a uniform, and rather artificial slope of about one to one, starting abruptly from the edge of a wall 4 feet thick which runs all round; while on the east side a fosse or dry ditch traverses the nose of the hill, running for 30 or 40 yards around the north and south sides; this ditch is now 6 feet wide at the bottom, with a mound on east side rising 5 feet above the level of the bottom, 9 feet wide on the top, and sloping $1\frac{1}{2}$ to 1 on either side. The total length from east to west is about 470 feet and 150 feet broad at the widest part. As may be seen on the plan, there seems to have been a detached portion at the west end. I regret that a more complete plan cannot be presented on this occasion, but I hope after completing further excavations to present a complete plan of the original outline. I have only drawn on this plan what can now be traced, and I have dotted in such portions as remain doubtful.

The "well" shown is merely an excavation scooped out of the conglomerate rock, and being filled with stones, I could not ascertain its actual depth. I managed to push down a rod about 3 feet, which I believe is nearly its maximum depth. Tradition has it that in the bottom of this well the treasures of the castle were thrown, and the buildings set on fire by the occupants, on seeing the approach of Cromwell's army against it. That the materials of the building were removed from the site, there is abundance of evidence, for from the summit to the shore, the track where the stones were rolled down can be easily traced, and a large block of the building, still lying on the shore, and weighing fully 4 tons, testifies to the truth of this supposition.

Hoard of Flat Bronze Celts found at Ladyhill.—Through the kindness of Mr Hutchison, W.S., Elgin, I am enabled to send drawings of two of a hoard of five bronze Celts found many years ago in the vicinity of Ladyhill, and presented by James Fletcher, Esq. of Rosehaugh, to the Elgin Museum.

Drawing No. 1 represents—full size—the most perfect specimen. It is of the ordinary type of flat bronze Celt, 5 inches long, and $2\frac{1}{2}$ inches wide at the broadest point across the cutting face.

No. 2 is less perfect in outline, and measures $5\frac{1}{10}$ inches in length and $2\frac{1}{2}$ inches at widest part across the cutting face. The other three are all more or less of uniform shape, and similar in every respect to the two which have been described. They were discovered while trenching a field in the vicinity of the ruins of the castle.

Small cannon balls are also sometimes discovered in the field adjoining, and one weighing about 4 lbs. was found while digging a sand-pit about 600 yards north of the castle.

Standing Stone.—In the vicinity of the castle and a little further up Munlochy Bay, there stands on the terrace, on a circular mound about 10 feet high and 44 yards in circumference, an obelisk of red sandstone 12 inches by 9 inches, slightly tapered, and 8 feet 8 inches high above the ground. According to tradition, it was placed there by a giant who lived in the cave of Craigiechow, immediately opposite; it is, however, most probable that it is a monument erected by the Mathesons, once owners of these lands of Bennetsfield, as it bears on the west face the initials G.M.K. and date 1752, and on the opposite face I.M. E.M.K., 1755, with the Caberfeidh (stag's head) or the Mackenzie crest, and the name of John Matheson and Elizabeth—the surname being hid by a clasp of iron which binds the stone.¹ Northwards from Ormond Castle, and within sight of it, and about $\frac{3}{4}$ of a mile north of Avoch Church, are the ruins of Arkendeith Tower, called "Airc-Eoin-dubh," or Black John's Ark or place of safety. Black John was a Highland reiver: making raids on his surrounding neighbours, and carrying his booty in safety to his strong fortified dwelling. Nothing now remains of it but the lower story, consisting of a strong walled square room, with the arched or vaulted roof of the dungeon still intact; it seems an erection contemporaneous with Fairburn Tower in the west of the Black Isle, and perhaps not of so much antiquity as is generally ascribed to it. In the *Retours* (1611–18) there is mention of the Bruces of Kinloss holding the lands of Muireal-house and Arkindeuch.

¹ Immediately below this monument is Craigcock Well, to which hundreds resort for its healing virtues on the first Sabbath of summer. A dripping well in Craigiechow Cave is supposed to cure deafness.

X.

NOTES ON A PECULIAR CLASS OF RECUMBENT MONUMENTS.

By J. RUSSELL WALKER, ARCHITECT, F.S.A. SCOT.

These recumbent stones are of rare occurrence and singular type. By some writers they have been described as "hog backed," from the peculiar resemblance the curved top has to the back of a hog; and by others they have been described as keel or boat shaped. The area in which they are found is, so far as I can find, limited to England and Scotland, and in each country there seems to be only a very small number of examples—probably thirteen or fourteen at the most. One or two writers have referred to them as coffin lids, but a single glance at their transverse sections serves to dispel that idea; and there can be no doubt, I think, that they were used singly, and possibly in groups, as recumbent memorials. Why they took this shape is a matter for considerable speculation. They have been called Danish, Dano-Scottish, Celtic, and Saxon. The period of their production may, I think, range from the ninth to the twelfth century. I will now describe those I have seen and made drawings of.

The first of these monuments to be now noticed (fig. 1) is at Abercorn, in Linlithgowshire; its present position is a little to the south-west of the interesting old church, and it lies almost due east and west. It measures 6 feet 3 inches in length, and is 16 inches thick at the centre; both sides curve downwards from a narrow flat ridge, which is not placed at what the apex of a triangle would give as the centre of the stone, but to the one side, so that one side has a sharper curve than the other; both sides are covered with straight rows of a regular scale-like ornament, very commonly used in Romanesque architecture for the decoration of capitals, string courses, &c. The curve of the top is not a regular fall to each end from the centre, but falls more quickly to one end, the height of the stone in the middle being 2 feet 1 inch, at the highest end 1 foot 8 inches, and the other end 1 foot 5 inches. The flat ridge is regular in width from end to end, and slightly raised above the surface, and at each end there is a flat band about the same width,

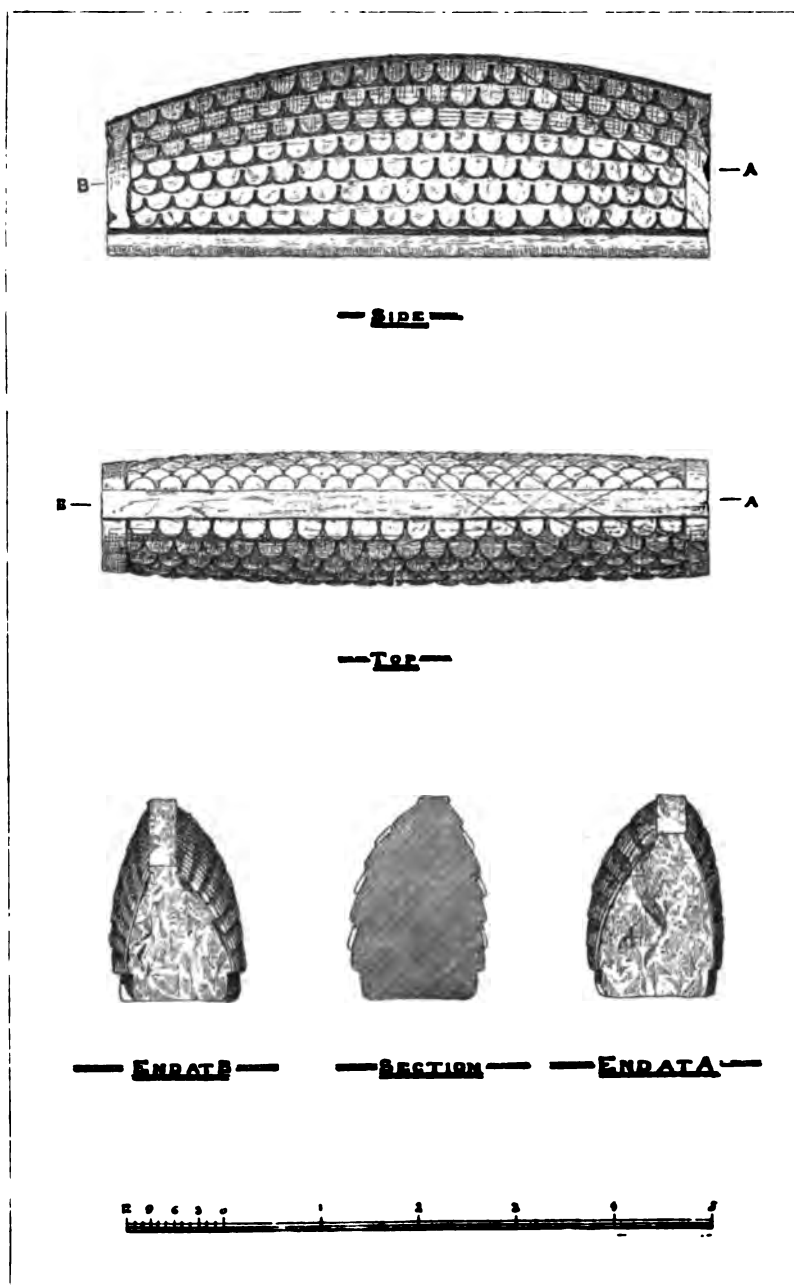


Fig. 1. Recumbent Monument at Abercorn.

viz., 3 inches, running down the sides. At the bottom of each side the stone is checked back about an inch, and forms a plain undecorated band from end to end of the stone; the bottom is slightly hollowed out. Both ends are perfectly plain, and seem always to have been so. Towards the high end of the stone there are several lines drawn across the top and sides, intersecting each other on the ridge. So far as I can learn, it occupies its original position in the churchyard; it is in excellent condition, and very little worn by the action of the weather. There is said to have been another of the same class here, but it has long since been lost sight of, very probably broken up or buried.

The next example (fig. 2) is at Brechin. It is the most elaborate specimen of the class that I have seen, the whole surface being beautifully covered with interlaced dragons and other figures; four of these figures towards the largest end of the stone are evidently intended to represent human beings. This stone does not have the peculiar outline that has induced several writers to give the fanciful name of "hog back" in writing of them. In section the stone is flat bottomed, the sides straight, and gradually rounding away to the top. The sculpture has been deeply and boldly cut. The present length of the stone is 4 feet $8\frac{1}{2}$ inches, but both ends seem to have been broken off; the greatest thickness is at the centre, where it measures 18 inches, at the smallest end it is barely 15 inches across; the greatest height is in the centre, and measures 10 inches by about $6\frac{1}{2}$ inches at the small end. Its present position is within the ruined chancel of the fine old church, where it is fixed against the south wall.

The third example (fig. 3) is at Dornock, near Annan, Dumfriesshire. I have had some hesitation in classing this stone as of this peculiar type—it may have been a coffin lid, but I can scarcely think so. It is triangular in section, with the sides perfectly flat; it slightly increases in width towards the one end, and the top does not curve downwards to the ends, as is the case with other examples, but the ridge is flat and well developed. Each side is divided into four distinct panels by a small rounded bead, and the panels are filled in with a very peculiar leaf ornament, altogether different from anything in the way of ornament I know of in Scotland, but very similar in style and character to the



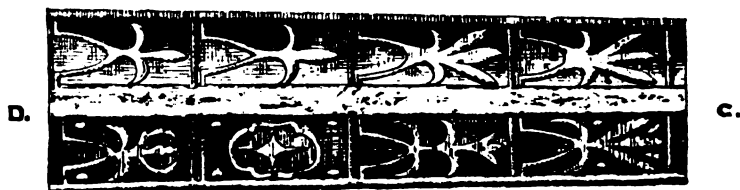
Fig. 2. Recumbent Monument at Brechin.



SIDE A.



SIDE B.



TOP.



END C.



SECTION.



END D.



Fig. 3. Recumbent Monument at Dornock.

ornament on some of the capitals of the early churches at Glendalough, in Ireland. The ends are also ornamented—the narrow end with a fan-like pattern, and the other with four circles set in the arms of a cross, the whole being within a containing circle, raising the design above the rest of the stone. The length of the stone is 6 feet 8 inches, width at the largest end 2 feet, and at the small end 1 foot 9 inches, and the height 1 foot 3 inches.

The next example (fig. 4) lies alongside that just described, and is of very similar character. The ends are higher than the centre, but this, I think, is due to mischief. Each side is divided into four equal panels, like the last, and filled in with raised foliated ornament. The stone measures 6 feet 6 inches in length, by a uniform breadth of 2 feet, and an average height of 18 inches. Both of these stones are in the churchyard of Dornock, close by the church, and easily found.

At Govan there is a group of five of these peculiar monuments; probably there are more, if the ground were carefully examined. I have made drawings of three of these, the other two are unfortunately nearly buried in the ground under a modern monument surrounded by a high railing. I understand the churchyard is to be raised and levelled when the new church is completed, and I may then be able to get drawings of them made. The first (fig. 5) is a very fine example of the class, and of large size. The ridge transversely is narrow and flat, and seems always to have been perfectly plain. The sides are divided into longitudinal bands, the upper band shows faint traces of a fret-like ornament; next follow two rows with triangular spaces cut out, somewhat like tiles on a roof, each space having a clearly defined narrow margin or fillet round it. The lowest band on each side is more of the panel shape, and filled in with a curious sort of half interlaced half fret-like ornament. Both sides convey the impression that the artist had either changed his mind pretty often during the progress of his work, or that he was working at a transitional period, when the old style was passing away and the new was not fully understood. On one end there is a small panel filled in with similar incised work; the other end seems to have been meant to represent a head of some sort, but the stone is so worn that the indications are faint. It measures 6 feet 6 inches in



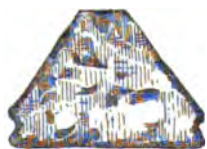
SIDE A.



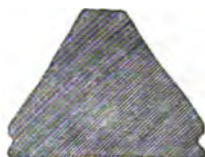
SIDE B.



TOP.



END AT C.



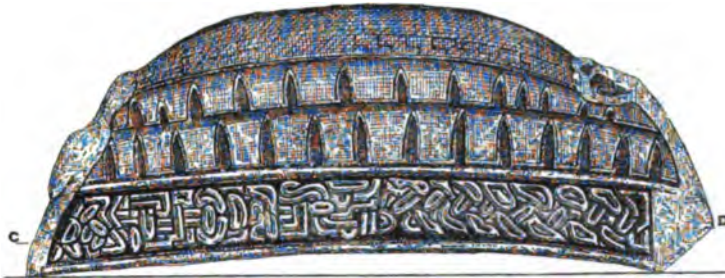
SECTION.



Fig. 4. Recumbent Monument at Dornock.



Side A.



Side B.



Top.



END AT C.



SECTION.



END AT D.



Fig. 5. Recumbent Monument at Govan.

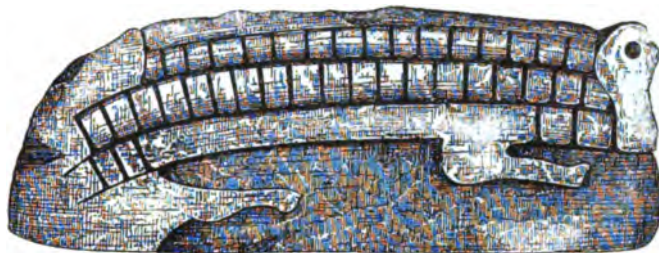
length by 2 feet $3\frac{1}{2}$ inches high at the centre, the greatest thickness being 11 inches. There is a considerable curve on the base in the longitudinal direction, and its whole appearance is very much like a fisher's "cobble" turned upside down.

The second monument at Govan (fig. 6) is clearly meant to represent some animal. The head is well defined, and the eye prominent; the back is flat on the top and plain, and slopes gently towards what we must call the tail end; the sides are covered with square flat scales, and the legs, though peculiar, are well marked. The sides below the decorated portion are straight and perfectly plain. The stone measures 6 feet 8 inches long, 2 feet 5 inches high, and 15 inches at the thickest point.

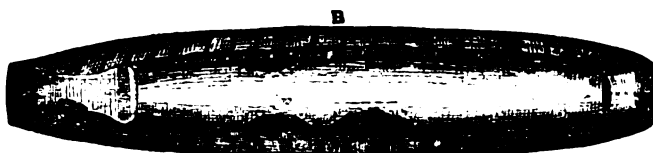
The third example at Govan (fig. 7) is the largest I have seen. It measures 7 feet 8 inches in length, 2 feet $3\frac{1}{2}$ inches high, and 2 feet thick across the centre. The ridge is very narrow and rounded, and has been finished at one end with a serpent-like head, now much worn and defaced. Both sides are completely covered with the tile-like ornament (also seen in the first example) arranged in rows. In section this stone is almost a triangle, and the bottom is perfectly flat. I am inclined to think that both ends have been broken away, or at least partially destroyed.

The next example (fig. 8), in the island of Inchcolm, has had more attention bestowed upon it than any of the others. In Stewart's metrical version of the *History of Hector Boece*, finished about 1535, this so-called Danish monument is referred to. Sir Robert Sibbald, in his *History of Fife*, published in 1710, gives a careful description of it. Pennant, in his *Tour through Scotland* in 1772, notices it; so also does Grose in 1797; and the late Sir James Y. Simpson describes it in his paper on Inchcolm, read before the Society, and published in the *Proceedings*.* The late Mr James Drummond, R.S.A., made a sketch of it for Sir James. Each end has terminated with a large head, but they are now much worn and defaced, and it is impossible to say what kind of creature they were meant to represent. There is no defined ridge, as in the majority of the examples, the top rounding away into the sides,

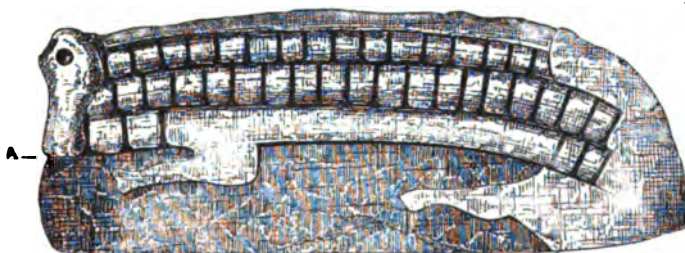
* *Proceedings Soc. Antiq. Scot.*, vol. ii. p. 496.



—SIDE A—



—TOP—



—SIDE B—

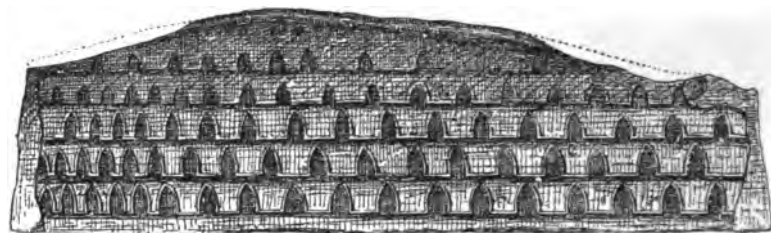


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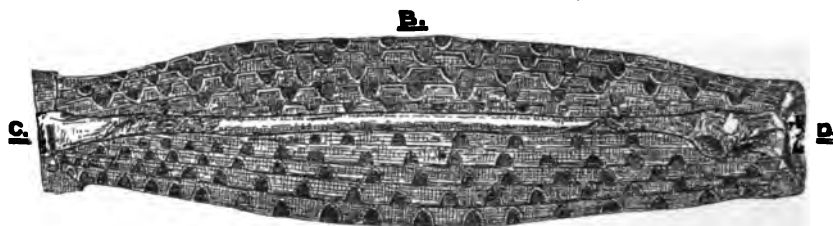
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Fig. 6. Recumbent Monument at Govan.



— SIDE A. —



— TOP. —



— END AT C. —



— SKETCH AT D. —



— SECTION. —



Fig. 7. Recumbent Monument at Govan.

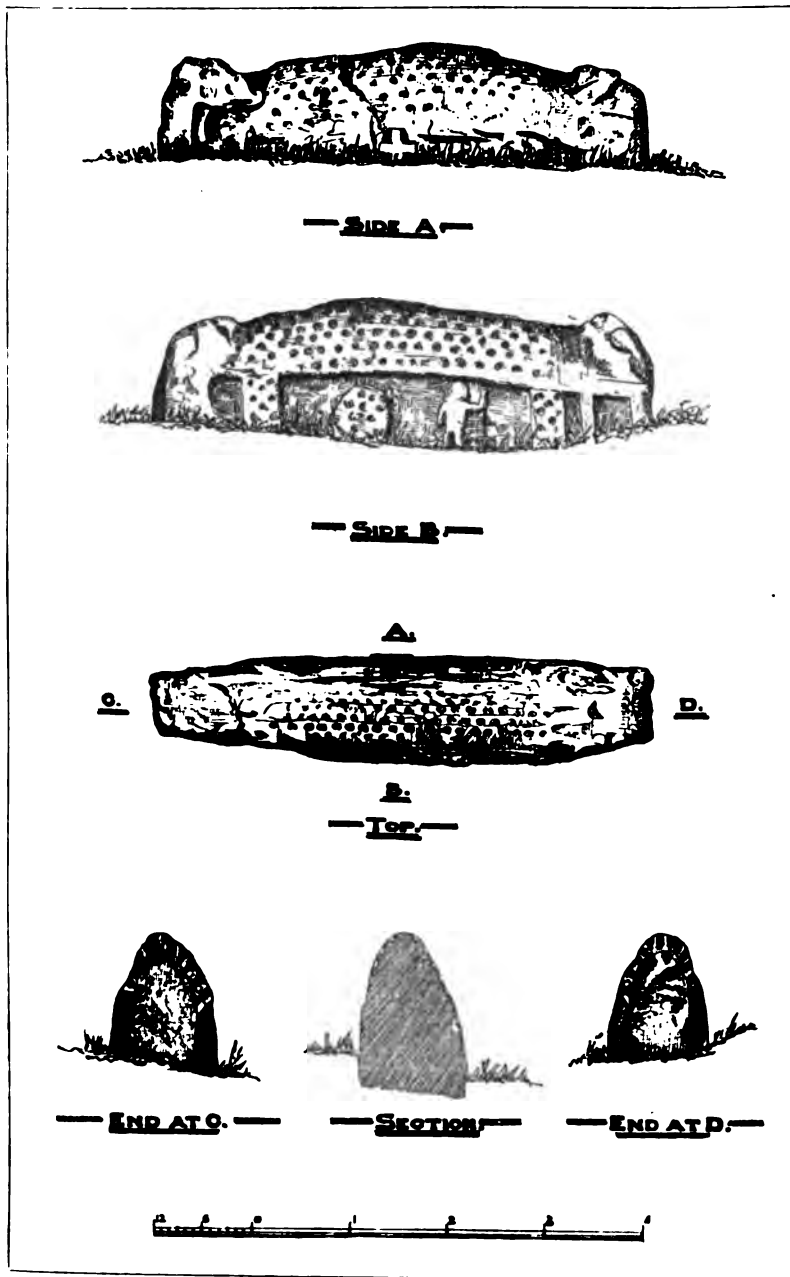


Fig. 8. Recumbent Monument at Inchcolm.

and the whole being covered with a curious cup-like ornament regularly placed. One side shows on the lower central part a small square limbed cross, and on the other side there is the figure of a man holding what Pennant describes as a spear, but of which there remain now but very faint traces.

Stewart's description of the monument is very interesting, because, as Sir J. Y. Simpson says, "it is not only a personal observation," but also as showing that in the year 1535 "the recumbent sculptured 'greit stane,' mentioned in the text, was regarded as the monument of a Danish leader, and that there stood beside it a stone cross, which has since unfortunately disappeared." After speaking of the burial of the Danes—

" Into an yle callit Emonia,
 Sanct Colnis hecht now callit is this dae,"

and the great quantity of human bones still existing there, he adds :—

" As I myself quhilk hes bene thair and sene
 Ane croce of stane thair standis on ane grene,
 Middis the feild quhair that they la ilk ane,
 Besyde the croce thair lyis ane greit stane ;
 Under the stane, in middle of the plane,
 Their chiftane lyis quhilk in the feild was slane."

The length of the stone is only 5 feet 2 inches, thickness at the centre 1 foot 1 inch, height 1 foot 8 inches at the highest point. It is a good deal weather worn.

The next example (fig. 9) at Luss, on Lochlomond, seems to be of later date than any of the others. Transversely it is roof-shaped, sloping away on each side from a central ridge, and covered with the scale ornament seen on the Abercorn example ; the sides are straight, and ornamented nearly along the whole length of one side with an interlaced arcade of distinctly Norman character ; the other side shows a shorter similar arcade, and three circular-shaped panels closely resembling the ordinary dedication crosses seen on pre-Reformation churches. One end has a slight resemblance to the head of a fish, the other is perfectly plain. The length is 5 feet 11 inches, height at centre 1 foot 8 inches, and greatest thickness 18 inches.

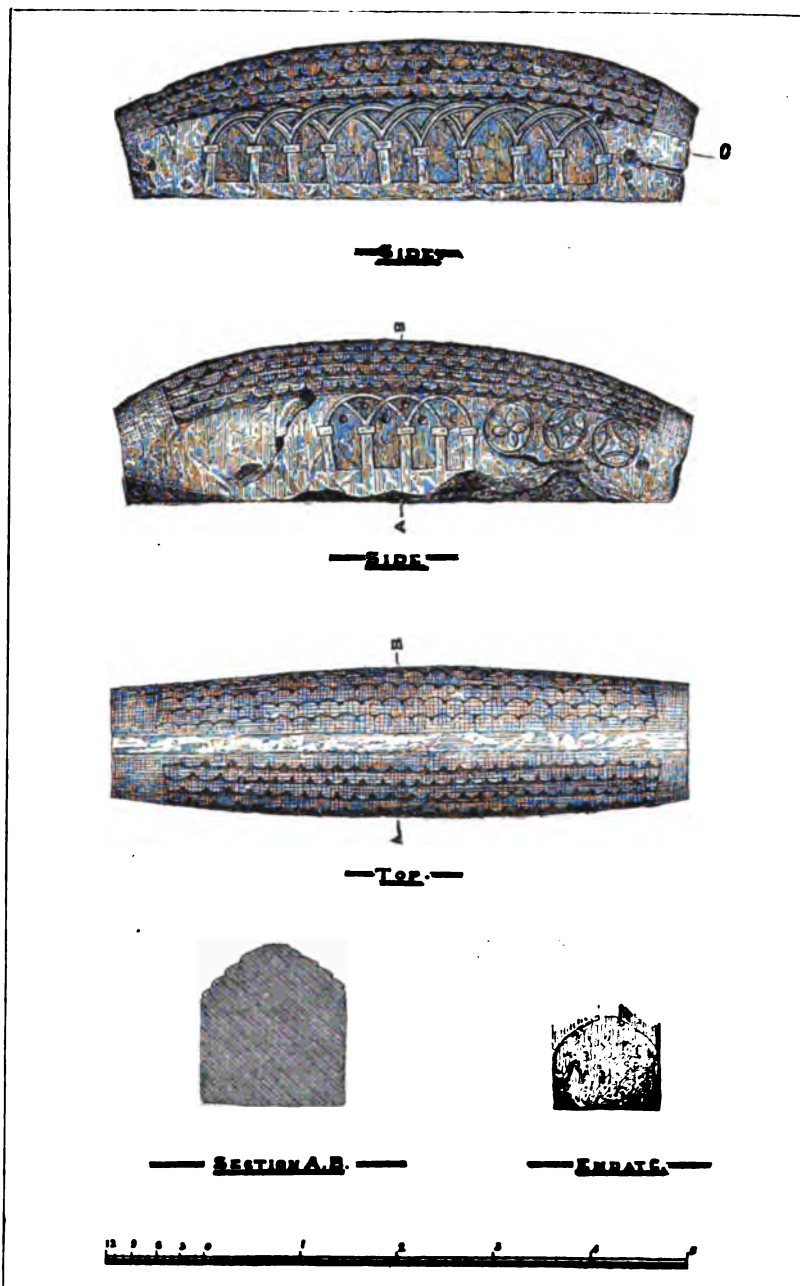


Fig. 9. Recumbent Monument at Luss.

The Meikle example (fig. 10) is of a peculiar shape, and differs from most of the others in that, viewed laterally, the top curves from the height of 1 foot 11 inches at one end to nothing at the other end; the narrow ridge is finished at the high end with a serpent-like head, and the sides are covered with the curious regular tile-like figures seen on the Govan examples, but without the narrow fillet running round the margin of each. The side of the rounded ridge has been ornamented with an interlaced pattern, and running down the sides below the head there is a small panel filled with a small ornamental pattern that must, I think, have originally been an interlacing one. The high end is perfectly plain, and the flat portion of the other end filled in with the tile arrangement. The length is 5 feet 1 inch, greatest thickness 1 foot, and greatest height 1 foot 11 inches. There is a curious twist on this stone, the ridge being to the one side, the same as in the Abercorn example; the bottom also is (unlike most of the others) not level, so that the one side is deeper than the other.

This completes the description of the Scottish examples which I have drawn, and with the exception of one entirely disfigured at Govan, parts of two that seem to have been of the same type at St Andrews, and a coped stone in Orkney covered with the scale ornament,¹ I know of no more in Scotland as yet discovered.

Examples are to be found in England at Durham, Brompton, York, Bedale, Repton, Heysham, Bakewell, Hexham, and Penrith.

The drawings of the remarkable group of monuments at Penrith were made by one of my assistants, Mr A. H. Crawford, during a holiday. Fig. 11 shows the stones as they lie at present, viz., two on each side, and a cross at the head and another at the feet; little more than the shafts of the crosses remain, and they are very much worn. It is difficult to say whether the stones are in their original position or not, but from what Stewart, writing in 1535, says of the Inchcolm example, I am rather inclined to think they are. The people of the district call it "The Giant's Grave." The hog backed stones are very much worn and defaced, and two of them are split into separate pieces; the two best are

¹ Low's *Tour through Orkney and Shetland in 1774* (Kirkwall, 1879), p. 55.

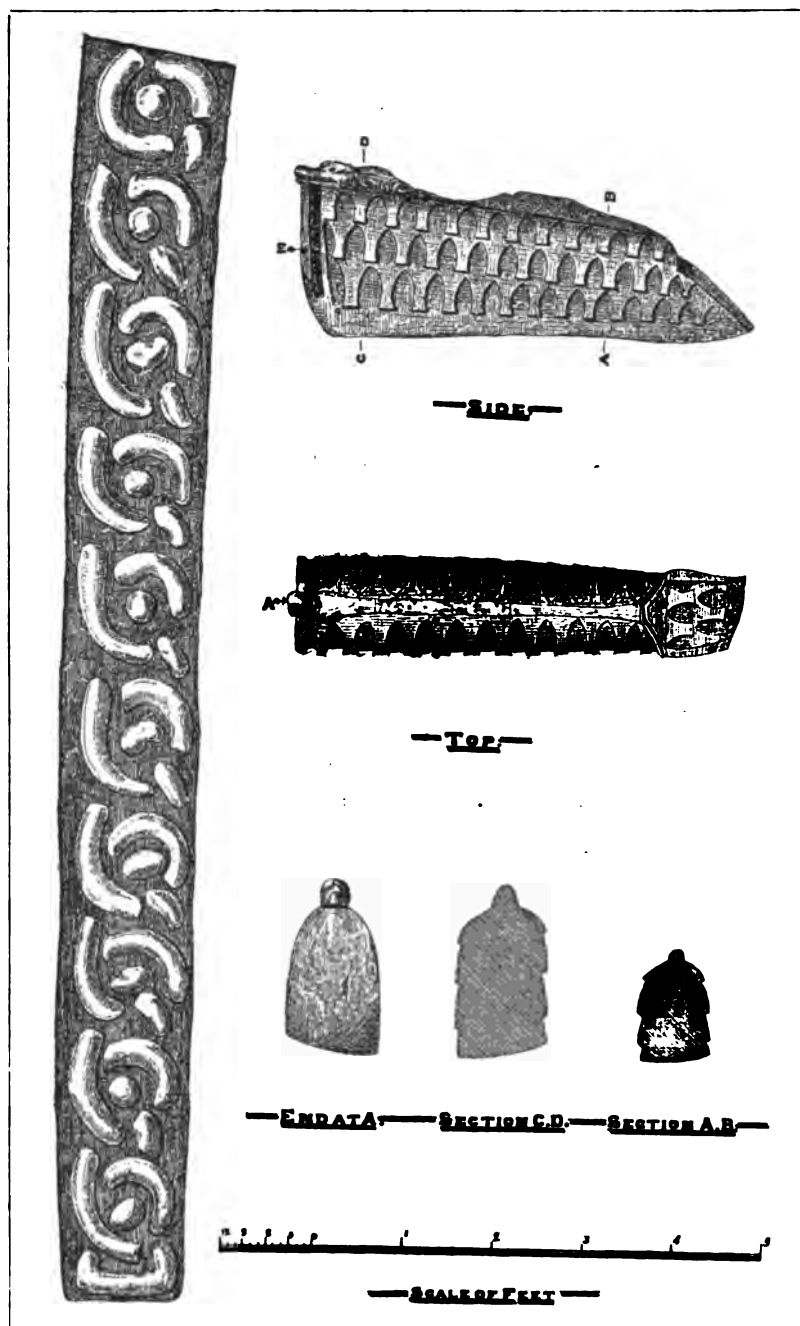


Fig. 10. Recumbent Monument at Meigle.

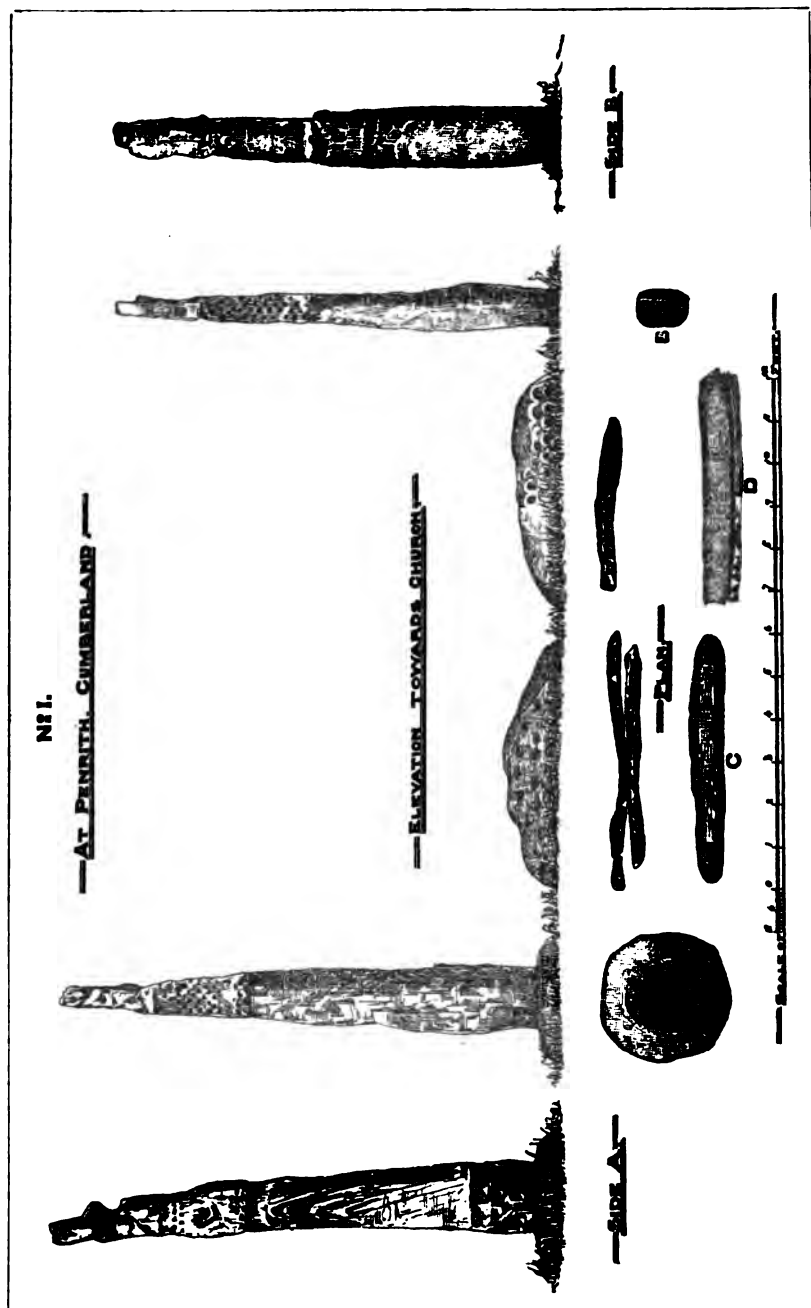


Fig. 11. Group of Recumbent Monuments and Crosses at Penrith.



— **STONE AT Q.** —



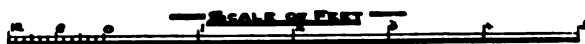
— **STONE AT R.** —



— **SECTION OF D.** —



— **SECTION OF C.** —



— **AT HEXHAM.** —



Fig. 12. Recumbent Monuments at Penrith and Hexham.

shown in fig. 12 (C and D with their sections) to the same scale as the Scottish examples; the largest is 5 feet 11 inches long, and the other 5 feet 7½ inches. The present height of the crosses is respectively 11 feet 3½ inches and 10 feet 7 inches.

On the same drawing (fig. 12) I am able to give a representation of the example at Hexham, from a sketch kindly sent me by C. C. Hodges, Esq., architect. This monument, which is a very characteristic specimen of the class, measures 4 feet 1 inch in length, and about 1 foot 11 inches in height at the centre. The bottom has a considerable curve on it in the longitudinal direction, and in this resembles one of the Govan examples. There is a fine drawing of the Hexham example in the Rev. E. L. Cutts's *Manual for the Study of the Sepulchral Slabs and Crosses of the Middle Ages*. He classes it under the head of eleventh century remains. He also gives smaller drawings of examples at Bedale and Durham, and states that many of them have the sides cut to "represent overlapping square tiles. This," he says, "overthrows the idea that these monuments represent Danish boats." An example at Dewsbury, Yorkshire, is engraved in Whittaker's *Loidis*.

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